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AUTHOR Grandgenett, Donald J.
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ABSTRACT

This study determined if added information in the form of a 10-minute teaching demonstration on video tape would significantly change the ratings given 10 teacher candidates by 10 judges in an earlier 15-minute interview. The judges were members of the Omaha school system responsible for interviewing and hiring new teachers. Subjects were second-semester student teachers at the University of Nebraska at Omaha. Statistical results indicated that there were no significant differences between the ratings of judges using only the traditional interview method and the ratings of those benefiting from the additional video tape. However, the lack of agreement among the judges in ranking the candidates in both the interview and the videotaped demonstration may have been significant enough to mask any treatment effect of the video tape. A criterion, and evaluative check list, or some other rating process that has reliability, needs to be developed by school systems for the selection of teacher candidates. (Selected appendixes are included.) (JB)

ED 083183

A COMPARISON OF THE RATINGS GIVEN TEN TEACHER APPLICANTS BY TEN PUBLIC SCHOOL ADMINISTRATORS AFTER A TRADITIONAL INTERVIEW AND A VIDEO-TAPE TEACHING DEMONSTRATION

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A Study

Funded by the Senate Research Committee

University of Nebraska at Omaha

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by

Donald J. Grandgenett, Ed.D.

May 1972

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CHAPTER I

THE PROBLEM

The investigation was concerned with a comparison of ratings of ten University of Nebraska at Omaha second-semester student teachers by ten Omaha metropolitan public school employers utilizing the traditional interview procedure with the added exposure of a ten minute teaching demonstration on video-tape.

The traditional method of selecting the best qualified teaching personnel has come under recent attack by some administrators. Heald and Moore seem to suggest the need for more information in making a candidate selection when they stated,

> When a Superintendent arbitrarily decides for or against a candidate on the basis of grade point average, marital status, or the modulation of the applicant's voice, his decisions can only be subjective.

Fawcett appeared to be somewhat doubtful of relying only on an interview for the selection of personnel when he stated in his book, School Personnel Administration:

> Much has been written about the usefulness of the personal interview in the selection of personnel. One distinguished author from the University of Texas has characterized it as useful only for the purpose of determining whether the candidate needs a seeing-eye dog.

Today there is an acute awareness of the vital role of education in a democracy. This consciousness has prompted wide spread re-examination of the structure, re-definition of purposes and re-evaluation of the processes of education. One way to improve public education is through better selection of teachers; therefore, a study utilizing added information in this process was considered important. The outcome of such a study could have valid implications for the selection of teachers and training personnel for public schools, universities, and related professions.

STATEMENT OF THE PROBLEM

The purpose of this study was to determine if added information in the form of a ten minute teaching demonstration on video-tape would significantly change the ratings given ten teacher candidates by ten judges in an earlier fifteen minute interview.

PURPOSES OF THE STUDY

The purposes of this study were: first, to secure, list and identify data concerning current policies and practices of teacher selection in secondary schools; and second, to analyze the data obtained with regard to hiring procedures using traditional methods and an added exposure of a ten minute teaching demonstration on video-tape.

More specifically, it was the purpose of this study to test the following hypotheses:

1. There will be no significant difference between groups that have had the traditional method of job placement ranking and those that have had the additional benefits of the V.T.R. teaching demonstration.
   Ho_1: $j = 0$ for j Ho_A: $j \neq 0$ for j

2. There will be no significant difference between judges in subject ratings.
   Ho_2: $= 0$ for B_k Ho_A: $\neq$ for all B_k

3. There will be no significant interaction between judges and treatment levels.
   Ho_3: $B_{jk} = 0$ for B_{jk} Ho_A: $B \neq 0$ for B_{jk}

DEFINITION OF TERMS USED

Video-tape. This term denotes Sony one-half inch V.T.R. equipment. It consists of a portable 1/2 inch V.T.R. recorder and camera and a 9 inch V.T.R. monitor for viewing the teaching demonstration.

Teaching demonstration. Two selected five minute video-tape segments of a lesson in which a teacher is working with real secondary students in a real classroom pursuing a real lesson. One 4 1/2 minute V.T.R. clip was of the teacher lecturing and one 4 1/2 minute V.T.R. clip was of him working with a small group. Thirty seconds of the students entering the room and thirty seconds of them leaving the room was included in the total ten minute clip at the request of the judges.

Teachers. For this study, this term designates ten English student teachers who were doing their second semester of student teaching in the Spring Semester of 1972.

Judges. This group consisted of ten individuals in the metropolitan area who have been given the responsibility by their school system for interviewing teachers for possible employment.

Interview. This was a regular interview conducted in the traditional manner as dictated by the prospective employer, with the exception of a twenty minute time limit for each candidate.

MAJOR ASSUMPTIONS

In the initial phase of this study, it was necessary to make a number of basic assumptions for the purpose of forming a framework and a point of departure for the research.

It was assumed that the ten judges involved in the study were competent and sophisticated enough to make reliable and valid judgements concerning selection of teachers.

It was assumed that all interviews were conducted under normal conditions.

It was assumed that all the teachers had the necessary qualifications for placement consideration by the school systems involved and that all credentials were complete and available to the judges.

It was assumed that each candidate was given equal exposure on the V.T.R. clip through the use of timed segments.

Finally, it was assumed that the period of two weeks which was allowed between the interviews and the viewing of the V.T.R. clip was sufficient to assure maximum objectivity in the scoring by the judges.

MAJOR LIMITATIONS

This research was begun with a realization of existent inherent limitations within the study. The limitations that result from such factors as techniques of sample determination and research aims may introduce certain biases. Specific limitations of this study include

the following:

1. Only Secondary English student teachers enrolled in Advanced Student Teaching in the Spring Semester of 1972 were included in this sample.

2. Only judges from major school systems of the Omaha/Lincoln metropolitan area were considered as a part of the study.

Other noncontrolable factors which may have effected the research were: (1) the psychological set of the judges and candidates at the time the interviews were conducted; and (2) the eccentricities of the individual video-tape situations.

IMPORTANCE OF THE STUDY

In the decade since 1960, the use of the video-tape recorder in teacher education has become almost as commonplace as the use of some of the earlier observation and feedback techniques - audiotape recordings, 35 mm time-lapse photographs, kinescopes, and motion picture films.

However, a perusal of the literature germane to research on video-tape feedback in pre-service and in-service teacher education programs will reveal very little in the way of empirical research compared to the voluminous citations of so called "testimonial reports." Citing these articles as to what others are doing at "Jones College" is important, because most of our research emanates from current or planned practices and the need to evaluate their effectiveness, rather than the more efficacious use of research and development models.

The purpose of the project was to determine whether a ten minute segment of a video-tape showing the student teacher in the actual classroom situation would assist a school-employing official in the judicious selection of a beginning teacher. At no time was any thought given to replacing any of the traditional evaluative tools of placement with the video-tape. From the very beginning, video-tape was thought of as only a supplement to the conventional forms usually found in the credentials folder.

CHAPTER II

RELATED RESEARCH

The following summation of related research studies does not deal directly with the use of the video-tape recorder as described in this study. An extensive search of the related literature and research journals produced no specific studies in this problem area. However, the review of literature does indicate several studies in which the video-tape has been used in teacher education.

A descriptive journal article by Cyphert and Andrews (6:1067-69) definitively analyzes the uses of video-tape in teacher education, and is used here because most of the research findings reported to date are related to one or more of the following uses which are relevant to teacher education. The article describes the use of video recordings to provide: (a) observation material for a class or an individual student; (b) immediate private feedback for a student teacher or counselor trainee concerning his performance; (c) evaluation of performance by a supervisor and a trainee; (d) specific pre-planned recorded lessons as a basis for methods course instruction; (e) situation materials to be used with simulation procedures or case study analysis; (f) feedback and supervisory analysis prior to immediate replication of performance; (g) both demonstration and feedback in developing

specific teaching behaviors; (h) evaluation of teaching performance on a before-and-after time lapse basis; (i) research analysis of teacher behavior, pupil behavior, or teacher-pupil interaction; and (j) instructor-prepared materials for use with closed-circuit television, dial access, or film loop independent study activities.

Much of the early research utilizing the video-tape recorder was a spin-off from Stanford's microteaching project, from which Allen and Fortune (2:8) reported that in a TV feedback versus no feedback design, the trainees in the TV group had behavioral changes significant at the five percent level.

The University of Texas' Research and Development Center in Teacher Education (Fuller, 8:359) conducted research on students' openness to environmental feedback, with openness being operationally defined in terms of teacher behaviors such as increases in questioning and decreases in lecturing. Seventy-seven elementary education majors comprised one control group and three experimental groups which were tested and filmed before treatment (feedback) and again after student teaching 18 months later. Although pre-post change differences between experimentals and controls were not significant, the behavior of the total group changed significantly from the first to final filming--they lectured less, accepted pupils' ideas more, corrected more, and asked more questions.

Stoller, Lesser, and Freedman (17:177) postulated and tested the hypothesis that prepared kinescope recordings

provided a more effective medium of observation than closed-circuit TV and that TV observation was in turn more effective than the traditional procedure of direct observation in the elementary classroom. Results showed that an objective measure of information about methods of teaching failed to confirm the hypothesis, but an essay examination assessing ability to evaluate an observed classroom lesson strongly confirmed the hypothesis.

Schueler and Gold (16:359) conducted research at Hunter College on the use of kinescopes for supervising student teachers by using a research design of supervision via personal visitation (O), supervision via the use of kinescopes alone (K), and supervision via a combination of in-person visitation and kinescope recordings (OK). Using the instrument, OScAR, to measure change in teacher behavior, Schueler and Gold found no significant differences between the control group O and the experimental groups K and OK. They did report small differences favoring K over groups O and OK.

At Stanford, Aubertine's research (3:7) led him to conclude that some type of feedback was necessary in order to change the behavior of teacher trainees. Findings were that trainees who were provided video feedback and an opportunity to practice correcting their "mistakes" from previous teaching acts performed better at the one percent level of confidence on subsequent demonstrations than a control group which received neither feedback nor the opportunity to practice.

Brooks (5:1) tested the basic proposition that teachers

who appraised their classroom interaction as viewed on video-tape recordings would evidence greater growth in classroom behavior than would teachers who did not see themselves on video-tape. Changes in teacher behavior were determined by analyzing three 20-minute tapes of each teacher recorded before and after the inservice program, using an instrument which measured cognitive and affective teacher objectives, closed and open teacher methods, and verbal and nonverbal teacher expressions. Brooks' data analysis led to a rejection of the hypothesis that teachers who viewed video-tapes of their own teaching would experience greater growth than teachers who did not view their own tapes.

Woolman (18:9) investigated the effectiveness of video-taped demonstrations by assessing changes in instructional practices and viewpoints of teachers, by analyzing the results of the video-tapes with and without certain supervisory and counseling procedures, and by relating the amount of change as seen by trained observers to the amount of change as revealed by an inventory of teacher opinion and understanding. The inservice program participants viewed five 30-minute video-tapes which were prepared in advance. Observers visited and measured all of the teachers before and after the five tapes had been viewed. Woolman accepted the null hypothesis that there was no significant difference between the three groups that could be attributed to the treatments imposed.

Millett (12:3) attempted to answer the question, "Could video-tapes produced for training purposes which displayed both

selected pupil cognitive behaviors desired in secondary school social studies and also developmentally related teacher behaviors affect the teaching behavior of social studies intern-teachers?" Forty-three intern-teachers received identical classroom materials to use in an experimental lesson and were randomly assigned to one of four groups. Two groups served as quasi-control groups (did not view video-tapes), while the other two groups did view the video-tapes on how to use teacher translation tactics. Interns teaching an experimental lesson generated the data for measuring purposes. The statistical analysis showed a significant difference between the two groups which saw the video-tapes and the two groups which did not.

At Temple University, Kriebs (10:6) compared the effectiveness of the two types of video-taped instruction by determining if preservice teachers who observed video-tapes of elementary school children using scientific methods performed significantly better as science teachers than did preservice teachers who observed video-tapes of the traditional lecture-demonstration type. Pre- and post-video-tape checklists and pre- and post-tests of science knowledge yielded data which were analyzed to determine the relative effectiveness of the two techniques for teaching science methods to prospective elementary school teachers. The null hypothesis was accepted; however, those who observed the experimental video-tapes tended to increase their rating from their initial status to their final status more than those who observed the control video-tapes.

Barron (4:3) attempted to ascertain whether or not significant gains in openness would be evident in a selected group of teacher trainees who received elementary language arts methods instruction supplemented by microteaching and video-tape techniques over a group supplementing instruction by classroom observation and over a group not supplementing instruction at all. Barron concluded from his statistical analysis that Group One evidenced a positive and significant gain in openness as measured by a Teacher Problems Q-Sort. Groups Two and Three did not experience a significant gain.

An Ohio State University study by Reynolds (14:6) compared the change in role concepts of a group of science student teachers supervised in the usual manner with that of a group supervised with video-tape recordings. Using Corwin's Professional-Employee Orientation Role Concept Scale before and after student teaching, Reynolds concluded that there were no significant differences between the experimental group and the control group. However, 10 of the 18 behavior areas tested were significant for those who received video-tape feedback.

Young's (19:1) research at Stanford attempted to determine the effectiveness of dubbing a supervisor's comments onto a video-tape of a teacher's performance. All subjects in the experiment prepared five-minute lectures which served as a pre-test. The subjects then viewed symbolic model teachers on video-tape. Each subject retaught his first lesson two more times, with the last episode serving as a post-test. The

results of the study indicated that a model with a contingent focus (supervisory comments dubbed onto the tape) did not produce significantly greater differences in teacher behavior than did a model with a non-contingent focus.

Acheson (1:1) tested the effects on selected behaviors of teachers in training who observed their own teaching via video-tape during supervisory conferences. The study was a TV feedback versus no TV feedback design for three groups which received indirect supervision, direct supervision, and no supervision. The two criterion measurements were teacher monologue in terms of percent of time and the frequency of teacher-pupil interaction episodes. Television feedback combined with supervisory conferences, either direct or indirect, produced significantly greater changes in the selected behaviors than supervisory conferences without television.

A study by Roush (15:21-24) conducted with the University of Houston's Teacher Corps project used five five-member groups, each of which was video-taped three times. The control group's members did not receive any feedback, while the members of the four experimental groups differed in the amount and kind of video-tape feedback given. Each tape was coded with the Flanders Verbal Interaction Analysis System, using I/D Ratio as the quantitative criterion for behavioral changes. Although the means for Experimental Group Four were significantly higher than the other groups, an F test that failed to exceed the five percent level of confidence led to

the acceptance of the null hypotheses.

One of the first studies in this area was done by Olivero, (13:1) whose research answered the following questions: (a) Does feedback from supervisors who observe television recordings produce more change in trainees' behavior than feedback from supervisors who observe the lesson taught in the classroom? (b) Do trainees need to have feedback from supervisors in order to change behavior? and (c) Does verbal and video-tape feedback from supervisors produce more change in trainees' behavior than just verbal feedback from supervisors? Using the Stanford Micro-Teaching Appraisal Guide to quantify changes in behavior, Olivero reported that the answer to question one was no, answers to question two and three were yes.

One generalization might be drawn from these reviews: a lot of people are using the video-tape recorder, and there has been at least a minimal degree of success. Where there have been less than desirable results, the contributing factors are more likely to lie not with the equipment used, but with inadequate research designs, a lack of creativity on the part of the researchers, or the constraining limitations of measuring instruments. Whatever the conclusions, they should be put into the perspective of the "early days" of experimentation on the use of the video-tape recorder in teacher education. Also implicit in the reader's conclusions should be the idea that if teacher educators are going to continue to invest time and money in acquiring media accouterments for

learning laboratories, it is incumbent upon them to continue research in this area and, to go one step further, to put the research into practice.

CHAPTER III

METHODS AND PROCEDURES

The present study sought to secure and analyze data concerning hiring practices using the traditional method and the added exposure of a ten minute V.T.R. clip.

SELECTION OF THE POPULATION

The study was confined to the Omaha/Lincoln metropolitan area school systems. The judges were selected from the metropolitan school systems hiring a major percentage of the teachers in this area. The ten teachers for the study were randomly selected from a master list of the English second semester student teachers, using a table of random numbers. (See Appendix I)

PROCEDURES

The purpose of this section is to present a general overview of the procedures which were followed during the study in the areas of budget, selection of teachers and judges, interviews, video-taped teaching demonstrations and viewing sessions, and treatment of the data.

Budget

The proposal and a budget were prepared and submitted to the Senate Research Committee. The proposal was approved and funded, December 6, 1972. (See Appendix C) Equipment was then purchased for the study and insured through the Office of Business Finance. (See Appendix N) This equipment included a Monitor, the Video Corder, the Camera, a Wide Angle Lens, a Battery Charger, and one extra battery. Also purchased was a case for the equipment, ten video tapes, a tripod, and a stopwatch. The total cost of the equipment was $1,794.78. (See Appendix G for complete breakdown of budget). Two personnel, in addition to the Graduate Assistant, were hired to facilitate completion of this study. One was a Research Assistant and the other a typist.

Selection of Judges and Teachers

A request for participation in the study and a copy of the project was sent to the ten judges who were selected to be a part of the study. It was requested that they offer any comments or recommendations which would improve the study. Within two weeks all the judges had accepted. Two major recommendations were forthcoming: (1) that approximately one minute of the ten minute video-tape clip be devoted to the class entering the room and leaving the room; (2) that the interview be up to twenty minutes long instead of the fifteen minute period which was originally alloted. These recommendations were noted and incorporated into the study.

The selection of the ten student teachers was made from a list provided by the Secondary Education department of all the English second semester student teachers. A table of random numbers was used to determine which of these student teachers would participate in the study. A list of fourteen teachers was completed. After selection of these teachers, a meeting was held to explain the study, and each potential teacher candidate was given a copy of the study. Each of the first ten teacher candidates from the list consented to be a part of the study. Four alternates were chosen in case of cancellations. The teachers who participated in the study each filled out information slips and a permission form. These teachers were requested to complete their credentials at the earliest possible date.

Next, a list of teachers participating in the study was sent to the Placement Office to enable them to prepare and complete the credentials.

Permission was requested and received from the Omaha Public Schools to conduct the research study in their system. On February 17 and 18, each school involved in the study was visited. At this time a copy of the study was given to the principal of that school and to the co-operating teacher of the student teacher. During the week prior to March 1, taping schedules were set up for each of the ten teachers, and a list of basic instructions for the taping session were sent to the teachers. (See Appendix P) During the weeks of March 1 through March 16, each of the teachers was taped.

If he did not like his first taping a new appointment was set up and he was re-taped. It was found that certain teachers had conflicts on March 4th, the day of the interview. Therefore, the alternates that were previously chosen were contacted and were consequently taped. Each taping session was conducted by the Research Assistant and the Graduate Assistant. Each segment of the tape was carefully timed using a stopwatch to insure correct time allotments for each segment of the clip. The segments were taped alternately by the Graduate Assistant and the Research Assistant to insure against biases in taping.

The Interview

Permission was obtained from ten College of Education faculty members for the use of their offices on March 4 and March 18. Each judge was given a separate office. His name and the school he represented was identified by a sign on the door of his office.

The Latin Square was utilized to make a chart which assigned each teacher to each judge for a period of twenty minutes. Each teacher was given a schedule which told him where to go for each interview. A total of twenty minutes was allowed for each interview. During this time the judge interviewed the teacher candidate, and rated him on a scale of a low of zero (0) to a high of one hundred (100).

Every attempt was made to make the interview situation as realistic as possible. Each judge had a set of credentials for each teacher. Coffee was provided for the interviewer

and the interviewee upon request. One judge requested to be interrupted once during each interview. This was carried out as directed.

On March 4, all teachers and one alternate were present. Nine judges were present. One judge was ill and could not attend. (See Appendix O) Orientations were given in separate rooms to the set of judges and to the set of teachers. During lunch the teachers and judges were also separated, to insure greater validity of the study. During the interview each judge was supplied with a score card for each teacher that he interviewed. After dismissing the teacher, the judge placed a score between 1 and 100 on the score card. These cards were picked up before the next interview. At the conclusion of all the interviews the judges were asked to rate the student teachers in a rank order. After all the interviews had been conducted the teachers were asked to rate themselves as to what score they thought they received from each judge.

The Video-Tape Viewing Session

To prepare for the video-tape viewing session on March 18 a request was sent to the Audio Visual Department for ten video-tape recorders and ten monitors to be placed in each of the ten offices which were previously used for interviews. A reminder was also sent to the members of the Elementary and Secondary Education Departments whose offices were going to be used.

The taping and re-taping of the teachers was completed. All tapes were previewed and checked for proper timing. The names of the teachers to be viewed were placed on each of the office doors which contained a V.T.R. tape recorder and monitor. A Latin Square was again employed to randomize the order of viewing the demonstration tapes. The judges were again given score cards on which to mark their rating of one to 100.

On March 18 all nine judges were present. They were given fifteen minutes to view the ten minute clip and record the score for each teacher. These score cards were collected after each viewing session.

Treatment of the Data

In comparing the data for hypothesis number one for statistical significance, a two-way analysis of variance with repeated measures was used. In testing all other listed hypotheses a one-way analysis of variance was used. Analysis of Variance tables were used to interpret the data and report the findings. (A graphical description of the findings is included in Appendices L and M for the reader who wants an added method of analyzing the data. In reporting the study, only the Analysis of Variance tables were presented to analyze and interpret the findings.)

CHAPTER IV

RESULTS, CONCLUSIONS AND RECOMMENDATIONS

The purpose of this chapter is to present and analyze the data, to draw certain conclusions based on the summary of the results, and to make recommendations with regard to their implementation and further study.

THE PROBLEM

The purpose of this study was to determine if added information in the form of a ten-minute video-tape teaching demonstration would significantly change the ratings given ten teacher candidates by ten judges in an earlier fifteen-minute interview.

More specifically, it was the purpose of this study to test the following hypotheses:

1. There will be no significant difference between groups that have had the traditional method of job placement ranking and those with the additional benefits of a ten-minute video-taped teaching demonstration. (Ho_1)
2. There will be no significant difference between judges in subject ratings. (Ho_2)
3. There will be no significant interaction between judges and treatment levels. (Ho_3)

4. There will be no significant difference between judges for the traditional interview method. (Ho_{B1})
5. There will be no significant difference between judges for the video-taped teaching demonstration. (Ho_{B2})
6. There will be no significant difference between the traditional interview method and the video-taped teaching demonstration for each judge. (Ho_{AB})

RESULTS

In comparing the data for hypothesis number one for statistical significance, a two-way analysis of variance with repeated measures was used. In testing all other listed hypotheses, a one-way analysis of variance was used. Analysis of Variance tables were used to interpret the data and report the findings. (A graphical description of the findings is included in Apendices L and M for the reader who wants an added method of analyzing the data. In reporting the study, only the Analysis of Variance tables were presented to analyze and interpret the findings.)

According to the findings in Table 1:

1. The null hypothesis (Ho_1) that there is no significant difference between groups that have had the traditional method of job placement ranking and those that have had the additional benefits of the V.T.R. teaching demonstration is accepted.

2. The null hypothesis (Ho_2) that there would be no significant difference between judges in subject ratings is rejected at the .05 level of significance.

3. The null hypothesis (Ho_3) that there will be no significant interaction between judges and treatment levels is rejected at the .05 level of significance.

Table 1

Analysis of Variance for Method (A) and Judges (B) and Subjects (S).

SV	df	SS	MS	F
Method (A)	1	261.66	261.66	$\frac{261.66}{89.11} = 2.94$
Judges (B)	8	3,266.00	408.25	$\frac{408.25}{86.85} = 4.70*$
Subjects (S)	9	3,627.22	403.0	
AB	8	2,948.04	368.51	$\frac{368.51}{74.09} = 4.97*$
AS	9	802.01	89.11	
BS	72	6,253.28	86.85	
ABS	72	5,334.79	74.09	

*$p < .05$

The hypothesis (Ho_{B1}) states that there will be no significant difference between judges for the traditional interview method.

The hypothesis (Ho_{B2}) states that there will be no significant difference between judges for the video-taped teaching demonstration.

According to the findings of Table 2:

1. The null hypothesis (Ho_{B1}) that there will be no significant difference between judges for the traditional interview method is rejected at the .01 level of significance.

2. The null hypothesis (Ho_{B2}) that there will be no significant difference between the judges for the video-taped teaching demonstration is rejected at the .01 level of significance.

Table 2

Simple Effects of Judges (B) for Each Method (A)

SV	df	SS	MS	F
BA_1 Interview	8	3,623.32	452.91	$\frac{452.91}{86.85} = 5.2149^*$
BA_2 V.T.R.	8	3,078.40	384.8	$\frac{384.80}{86.85} = 4.45^*$
BS	72	6,253.28	86.85	

$^*p < .01$

The hypothesis (Ho_{AB}) states that there will be no significant difference between the traditional interview method and the video-taped teaching demonstration for each judge.

Table 3

Simple Effects of Method (A) for Each Judge (levels of B).

SV	df	SS	MS	F
A_{B_1}	1	125.00	125.00	$\frac{125.00}{89.11} = 1.4$
A_{B_2}	1	61.25	61.25	$\frac{61.25}{89.11} = .69$
A_{B_3}	1	80.00	80.00	$\frac{80.00}{89.11} = .90$
A_{B_4}	1	31.25	31.25	$\frac{31.25}{89.11} = .35$
A_{B_5}	1	2,332.8	2,332.8	$\frac{2,332.8}{89.11} = 26.18^*$
A_{B_6}	1	288.8	288.8	$\frac{288.8}{89.11} = 3.24$
A_{B_7}	1	.20	.20	$\frac{.20}{89.11} = <1$
A_{B_8}	1	288.8	288.8	$\frac{288.8}{89.11} = 3.24$
A_{B_9}	1	1.25	1.25	$\frac{1.25}{89.11} = <1$
AS	9	802.01	89.11	

$^*p < .01$

The effects of method (A) at Judge 5 (B_5) was significant at the .01 level. All other null hypothesis (A_{B1}) through (A_{B9}) are accepted.

CONCLUSIONS

Results of this study should be generalized to other situations only after definite relationships between those groups and the sample of this study have been clearly established. An examination of the findings in this study has led to the following conclusions:

1. A criterion check, an evaluative check list, or some other rating process that has reliability needs to be developed by school systems for selection of teacher candidates.

2. Very little prediction of teacher selection can be made with the present interview techniques or with the addition of watching video-tape in selecting teacher candidates.

3. The adding of video-tape for viewing by judges does not make any difference when they are free to use their own evaluative process.

4. As indicated by results of the study little can be done with preparing candidates for an interview due to the inconsistency of agreement among the judges.

RECOMMENDATIONS

The results of this study may be generalized only to populations that meet the sampling requirements used in this study. The results previously described and the limitations

thus set warrent the following recommendations:

1. A replication of this study should be made with the modified design of having five judges rate the interview and the remaining five rate the video-tape teaching demonstration at the first session. The sequence would be reversed at the second session.
2. A study should be made to develop a reliable criterion by which judges might rate teacher candidates more consistently.
3. More emphasis should be placed on exposing students to various interview situations in their undergraduate teacher training. This should involve actual interviews as well as role playing.
4. An opinion survey should be made of students who have participated in numerous interviews for the purpose of providing feedback in identifying problem areas in the interview process.
5. A program should be established which emphasizes alternative hiring procedures for training personnel who have the responsibility for teacher selection. This program should be organized as a seminar, a workshop, an inservice program, or a course.
6. A replication of this study in other states on a national basis, to determine better national

applicability and significance should be conducted.

7. A subsequent longitudinal study is recommended to measure changes in administrative attitudes toward the hiring process which may result from a so called "teacher surplus."

GENERAL COMMENTS ABOUT THE STUDY

In a study of this nature, there are always some comments and findings that were not deemed significantly important to report in the final write-up stage; however, they are of interest as an insight to the total study and to further research in the area. The reader is cautioned not to treat this part of the report as verified research, but more of the nature of added data that may or may not be significant.

The lack of significance in hypothesis number one, (which would not allow the rejection of the null hypothesis that there was no significant difference between the scores given the group of candidates by the judges between a regular interview and a video-taped teaching demonstration) might have due to several factors. The lack of agreement among the judges in ranking the candidates in both the interview and the video-tape demonstration may have been significant enough to mask any treatment effect of the video-tape. The tendency of the judges to remember certain characteristics of a candidate after rating them in an

interview may have influenced their rating of the video-tape demonstration.

Other results that may be interesting were:

1. In the majority of cases (75 per cent) students were rated lower as a group after the judges had viewed the video-tape demonstration, than when they were given a ranking after the interview.
2. Students stated in discussions following the interview that each interview was different in content, atmosphere, and the candidate's role. They could not speculate from one interview what the next one would be like.
3. The student teachers themselves were unsure of what to consider in deciding upon their "best performance" for use in a video-tape teaching demonstration. Several students stated they chose the first taping because of a lack of an example criterion to apply to their demonstration.
4. Several of the judges indicated they had no specific training to prepare them for selecting the "best" candidates from a group of applicants. In some cases, judges had little previous opportunity to examine their own interviewing skills or watch the methodology used by others with similar responsibilities.
5. All of the students in the study stated that it

was a worthwhile experience and that it was one that should be considered as an integral part of of the undergraduate program.

After completion of the study, it can be re-affirmed that the selection of candidates for a school system is one that is rich in promise, but in dire need of additional research.

APPENDIX D - LETTER OF BACKGROUND INFORMATION

UNIVERSITY OF NEBRASKA AT OMAHA

INTERDEPARTMENTAL CORRESPONDENCE 32/40

Date: December 2, 1971

To: Dean Carter - Senate Research Committee

From: Don Grandgenett

Subject: Research Proposal - Background Information

This idea for this study has come about from my many visits with numerous personnel in public schools and universities who have the responsibility of selecting teachers for positions in our public schools. The discussions have also included members of business and industry who have expressed a desire to know the results of such a study. Dr. Hunter, who is working with the C.O.O.P. program, has expressed an interest in the outcome of the study as well as Mrs. Yvonne Harsh, who is in charge of our placement service here at U.N.O. (see Appendix B). Last March, 1971, I visited with Dr. Hefley (see Appendix A) about the merit of this study. At that time, he suggested I undertake an exploratory study with the possibility of the results providing a basis for a larger project funded by the Federal Government.

In deciding upon the design and statistic to be used, I have visited with several of my colleagues here at U.N.O., including Dr. Wikoff and Dr. Kessler of the Psychology Department. I have attempted to incorporate these suggestions to make the study as "tight as possible". Every attempt will be made to be sure any biases in the study are minimized.

The purpose of providing this background information for the Research Committee is not to bias their decision, but to be certain that all information is available for them to consider in making their decision. I would be happy to discuss the study in person if they so indicate.

I'm certain this study will be done by someone in the near future, I'm hopeful it can be me.

Respectfully,

Don Grandgenett

Don Grandgenett,
Associate Professor of Education

bas

APPENDIX G - BUDGET

REQUESTED BUDGET FOR PROPOSED RESEARCH

41/46

Name of Applicant Don J. Grandgenett

Amount requested of Senate Research Committee

	$
A. SALARIES AND WAGES (Itemize names if known, and rate plus Social Security.) Social Security matching funds must be included in the budget for all salaries and wages paid out of Senate Research funds. Matching funds for 1971-72 are [redacted]. 5.4%.	5925.25
1. Permanent Appointments - Realeased time	1624.02
2. Graduate Assistants - Research Graduate Assistant Senate Research $1260.00 S.S. Matching Funds $65.52	1325.52
3. Temporary Appointments	None
4. Hourly and Part Time - Clerical and secretarial help Senate Research $380.00 Social Security $ 19.76	399.76
B. CAPITAL ADDITIONS AND PERMANENT EQUIPMENT	
1. Physical Plant Alterations and Service Facilities	None
2. Permanent Equipment	1900.95
C. OPERATING EXPENSES	
1. Consumable Supplies (See itemized sheet attached)	25.00
2. Travel (See itemized sheet attached)	100.00
3. Fellowships	500.00
4. Other Expenses. Specify (e. g., computer time, see Annual Report, Part III, Section B.5) - Telephone 017-1681-139	50.00
D. OVERHEAD	
TOTAL	$ 5925.25

A. SALARIES AND WAGES

1. Permanent Appointments - Released Time $1624.02

Based on four hours released time at present salary of 12,350 per year with 5.2% matching funds for Social Security.

2. Graduate Research Assistant

One graduate research assistant for one semester 1325.52

The duties of this research assistant would include assisting in the video-taping of the teaching demonstrations, helping in coordinating the interview sessions and aiding in the assimilation of the results. Under the direction of the author, he would assist in the preparation of the final report and dissemination of the results.

3. Temporary Appointments None

4. Hourly and Part Time-Clerical and Secretarial Help 399.76

The duties of this individual would include typing of letters and other study correspondence, helping arrange the Saturday morning sessions and other meetings in regard to the study. She will also type the final report of the study as well as type the material needed to publish the results as widely as possible.

B. CAPITAL ADDITIONS AND PERMANENT EQUIPMENT

1. Physical Plant Alterations and Service Facilities — None

2. Permanent Equipment

1 Sony Viderover, II model 3400/AVC 3400 — $1495.00
Dimensions: AVC-3400 Camera 2-13/16" (W) x 5" (H) x 15-1/16"D Weight 6 lbs. AV-3400 Videocorder 11" (W) x 6-3/16"H x 11-5/8" Weight 18 lbs. 12 oz. (with battery pack and reel).

This equipment is vital to the study in recording the VTR teaching demonstrations on Video-tape. Its portability and size make it possible to record these teaching demonstrations with a minimal amount of confusion to the normal classroom environment.

1 Sony CVM-920U Portable Monitor — 195.00
9" (measured diagonally)
Dimensions: 10-2/5" (H) x 9-1/3" (W) x 10-3/5" (D). Weight 10 lbs. 13 oz.
This monitor is needed for playback purposes in the study.

10 1/2 inch Video tapes V-30H 1210 feet $21.95 each — 210.95
Tapes will be used to record teaching demonstrations.

C. OPERATING EXPENSES

1. Consumable Supplies — 25.00

2. Travel — 100.00

3. Fellowships

This money would be used to pay each judge $25.00 for each Saturday morning that he was involved in the interview and the teaching demonstration. Payment would involve approximately $50.00 total for each judge for approximately two half days. The personnel involved in this study are extremely busy people and the amount of time on their part is more than in many studies where they simply fill out a questionnaire or a similar instrument.

4. Other Expenses - Telephone — 50.00

TOTAL $5925.25

APPENDIX G

ITEMIZED EXPENDITURES

DATE: MARCH 31, 1972

DIVISIONS	BUDGET AUTHORIZATION	INVOICE NUMBER AND/OR ITEM	EXPENDITURES	BALANCE
A. SALARY AND WAGES				
1. Permanent Appointment	$1624.02		$1624.02	
2. Graduate Research Assistant	$1325.52		$1325.52	
3. Temporary Appointment	none			
4. Hourly and Part Time	$ 399.76		$ 124.20	
(Additional funds transferred from "Honorariums" C-3)	+ $ 25.00		$ 54.00	
	$3374.30**		$ 178.20	$246.56
				$246.56
B. CAPITAL ADDITIONS AND PERMANENT EQUIPMENT				
1. Physical Plant Alterations and Service Facilities	none			
2. Permanent Equipment	$1900.95	0-15621		
(Additional funds 4/8/72)	$ 283.00	Case	$ 55.50	
TOTAL	$2183.95**	Battery Pack	$ 29.50	
		Ten VTR Tapes	$ 126.20	
			$ 211.20*	
		0-15620		
		Sony TV System	$1260.00	
		Wide Angle Lens	$ 54.00	
		Monitor	$ 162.00	
			$1476.00**	
		0-16319		
		Stop Watch	$ 11.51*	

DIVISIONS	BUDGET AUTHORIZATION	INVOICE NUMBER AND/OR ITEM	EXPENDITURES	BALANCE
		0-16050		
		Undirectional Microphone	$ 34.95	
		Adapter	$ 49.50	
		Tripod	$ 40.00	
		(less 23.2%)	$ 95.58*	
		0-16831		
		Electric Typewriter	$ 392.00*	
				$2183.95**
				- $2186.29*
				- 2.34 -
C. OPERATING EXPENSES				
1. Consumable Supplies (Additional funds transferred from C-3 "Honorariums")	$ 25.00	Duplicating services	$ 20.05	$ 50.00
	+ $ 25.00	Mail Room	$ 10.56	- $ 30.61
	$ 50.00**	Authorization Number 467		$ 19.39*
		February	$ 9.04	
		March	$ 4.48	
2. Travel	$ 100.00**	April	$ 14.24	
			$ 27.76*	$ 100.00
				- $ 27.76
				$ 72.24**
3. Fellowships (Honorariums)	$ 500.00**	Mr. Monty Allgood	$ 50.00	
		Mr. Paul Basler	$ 50.00	
		Mr. Rex Cadwallader	$ 50.00	
		Ms. Sharon Clark	$ 50.00	
		Mr. John Johnston	$ 50.00	
		Dr. Frank Lee	$ 50.00	
		Dr. Carroll Sawin	$ 50.00	
		Mr. Craig Whitney	$ 50.00	
		Mr. Ron Witt	$ 50.00	
			$ 450.00*	

DIVISIONS	BUDGET AUTHORIZATION	INVOICE NUMBER AND/OR ITEM	EXPENDITURES	BALANCE
				$ 500.00
				- $ 450.00
				→ $ 50.00
4. Other Expenses	$ 50.00**			- $ 50.00
a. Audio Visual Department		#P-2446 10 slides of graphs	$ 3.50#	$ 00.00**
		#12,073 10 name cards	$ 3.75	
b. Rental - Canon Calculator - two weeks			$ 35.00	
c. Telephone			$ 10.86	
d. Bookstore			$ 1.34	$ 50.00
				- $ 54.85
				- $ 4.85**
			TOTAL REMAINING as of 3/4/72	$ 331.00

KEY

\# Expenses incurred after March 31 but not received in a budget statement

→ $25 transferred to secretarial help and $25.00 transferred to consumable supplies

* Subtotal

** Total for a section

APPENDIX H

PERSONNEL

JUDGES

Mr. Monty Allgood Administrative Assistant	Omaha Public Schools
Mrs. Sharon Clark Administrative Assistant	Westside Community Schools (District 66)
Mr. Craig Whitney Director of Personnel	Council Bluffs Schools
Mr. Rex G. Cadwallader Assistant Superintendent	Bellevue Public Schools
Mr. Ron Witt Assistant Superintendent	Millard Public Schools
Mr. John Johnston Superintendent	Ralston Public Schools
Mr. Paul D. Basler Superintendent	Papillion Public Schools
Dr. Frank Lee Superintendent	Lewis Central Community Schools
Dr. Carroll Sawin Assistant Superintendent	Lincoln Public Schools
Mr. Benjamin E. Krantz Superintendent	Blair Public Schools

TEACHERS INVOLVED IN THE STUDY

Jon Bridgewater

Linda Cavey

Robert Frank

Ron Gabriel

Richard Hall

Carol Jackson

Henry Jackson

Kevin Nolan

Ruth Ridder

MaryBeth Shoemaker

BUDGETED STAFF IN STUDY

Dr. Donald J. Grandgenett - Project Director

Mrs. Sandra Wakefield - Research Assistant

Mrs. Charlene Ainsworth - Graduate Assistant*

Mrs. Sandra Vargas - Secretary

Mrs. LaDene Black - Secretary

*This person was not directly budgeted but devoted much of her time working on this study

APPENDIX I

LIST OF TEACHER CANDIDATES AS CHOSEN BY RANDOM NUMBERS

	NAMES	RANDOM NUMBER
1.	Cheryle Babbitt	16
2.	Jon Bridgewater	5
3.	Richard Brown	14
4.	Linda Cavey	11
5.	Robert Frank	9
6.	Mike Freis	13
7.	Ron Gabriel	8
8.	Richard Hall	6
9.	Carol Jackson	7
10.	Henry Jackson	1
11.	Charles Neumann	15
12.	Kevin Nolan	4
13.	Ruth Ridder	10
14.	Mary Beth Shoemaker	3
15.	James Tramel	12
16.	Marla West	17
17.	Marianne Young	2

APPENDIX J

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LATIN SQUARE OF RANDOMIZATION

LIBRARY TABLE OF LATIN SQUARES

This table was taken from Statistical Tables for Biological, Agricultural and Medical Research by R. A. Fisher and F. Yates (Edenburgh, Oliver & Boyd, 1955) pages 80 to 82.

A	B	C	D	E	F	G	H	I	J
B	G	A	E	H	C	F	I	J	D
C	H	J	G	F	B	E	A	D	I
D	A	G	I	J	E	C	B	F	H
E	F	H	J	I	G	A	D	B	C
F	E	B	C	D	I	J	G	H	A
G	I	F	B	A	D	H	J	C	E
H	C	I	F	G	J	D	E	A	B
I	J	D	A	C	H	B	F	E	G
J	D	E	H	B	A	I	C	G	F

LATIN SQUARE #1 INTERVIEW SCHEDULE

Random Letters (third randomization)

1	J	D	I	G	F	C	A	E	B	H
2	D	E	J	H	C	A	F	B	I	G
3	I	G	B	F	J	H	C	D	A	E
4	A	C	E	J	B	F	H	I	G	D
5	E	A	H	I	G	D	B	C	F	J
6	B	I	G	A	H	E	D	J	C	F
7	H	F	C	E	I	J	G	A	D	B
8	C	B	F	D	E	G	I	H	J	A
9	G	H	D	B	A	I	J	F	E	C
0	F	J	A	C	D	B	E	G	H	I

Number Code (Judges)

Allgood	1	Allgood	1
Basler	7	Clark	2
Cadwallader	4	Whitney	3
Clark	2	Cadwallader	4
Johnston	6	Witt	5
Krantz	0	Johnston	6
Lee	8	Basler	7
Sawin	9	Lee	8
Whitney	3	Sawin	9
Witt	5	Krantz	0

Letter Code (Candidates)

Bridgewater	4	Frank	A
Cavey	9	Shoemaker	B
Frank	1	Jackson H.	C
Gabriel	6	Bridgewater	D
Hall	0	Jackson C.	E
Jackson C.	5	Gabriel	F
Jackson H.	3	Ridder	G
Nolan	8	Nolan	H
Ridder	7	Cavey	I
Shoemaker	2	Hall	J

LATIN SQUARE #2 TAPE-VIEWING SCHEDULE

Random Letters (third randomization)

1	G	I	C	D	B	F	E	A	J	H
2	J	H	G	A	I	B	D	C	E	F
3	F	D	I	H	C	A	J	B	G	E
4	E	J	D	G	A	I	C	H	F	B
5	I	C	A	B	F	E	H	J	D	G
6	B	A	F	E	D	J	I	G	H	C
7	D	B	E	J	H	G	A	F	C	I
8	H	G	B	C	E	D	F	I	A	J
9	C	E	J	F	G	H	B	D	I	A
0	A	F	H	I	J	C	G	E	B	D

Number Code (Judges)

Allgood	3	Basler	1
Basler	1	Whitney	2
Cadwallader	8	Allgood	3
Clark	9	Johnston	4
Johnston	4	Krantz	5
Krantz	5	Sawin	6
Lee	7	Lee	7
Sawin	6	Cadwallader	8
Whitney	2	Clark	9
Witt	0	Witt	0

Letter Code (Candidates)

Bridgewater	7	Gabriel	A
Cavey	4	Shoemaker	B
Frank	3	Frank	C
Gabriel	1	Cavey	D
Hall	0	Nolan	E
Jackson C.	8	Ridder	F
Jackson H.	9	Bridgewater	G
Nolan	5	Jackson C.	H
Ridder	6	Jackson H.	I
Shoemaker	2	Hall	J

APPENDIX K

KENDALL'S COEFFICIENT OF CONCORDANCE

CALCULATION OF THE COEFFIEIENT OF CONCORIANCE, THE DATA CONSISTING OF THE INTERVIEWING RANKING OF TEN CANDIDATES BY NINE JUDGES.

(1) Individual Candidates	(2) Judge's Ranks									(3) Sum of Ranks	(4) D	(5) D^2
	1	2	3	4	5	6	7	8	9			
A	8	5	6	1	6	2	4	4	9.5	45.5	4.0	16
B	9	1.5	5	3	7	1	6.5	2	2.5	37.5	12.0	144
C	1	7	1	5.5	3	3	1	6	1	28.5	21.0	441
D	10	9.5	2	8.5	4	5	6.5	7	6	58.5	9.0	81
E	2	7	10	8.5	2	7	1.	9	6	55.5	6.0	36
F	3.5	1.5	3	5.5	9	9	1.	3	6	44.5	5.0	25
G	6.5	9.5	4	8.5	10	10	10	10	6	74.5	25.0	625
H	5	7	9	8.5	1	8	3.5	5	9.5	61.5	12.0	144
I	6.5	4	7	3	5	6	3.5	8	6	54.0	4.5	20.25
J	3.5	3	8	3	8	4	2	1	2.5	35.0	14.5	210.25
										495.0		1742.50

$$W = \frac{12(1742.5)}{81\ (10)\ (99)}$$

$$W = .261$$

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Kendall's Coefficeient of Concordance, W.
Basic Statistical Methods, Third Edition, N.M. Downie and R.W. Heath, (Harper & Row, N.Y., 1970) pp. 124-125.

CALCULATION OF THE COEFFICIENT OF CONCORDANCE, THE DATA CONSISTING OF THE TAPING RANKING OF TEN CANDIDATES BY NINE JUDGES.

(1) Individual Candidates	(2) Judge's Ranks									(3) Sum of Ranks	(4) D	(5) D^2
	1	2	3	4	5	6	7	8	9			
A	8.5	9	6.5	9	8	3	6	6	9.5	65.5	16.0	256.0
B	10	3	2	3	1	4	4	3.5	4.5	35.0	14.5	210.25
C	1	5	4.5	6.5	6	1.5	1	6	1	32.5	17.0	289.0
D	7	8	9	3	3	1.5	10	3.5	2.5	47.5	2.0	4.0
E	4	6	4.5	10	7	8	9	10	9.5	68.0	18.5	342.25
F	6	1	9	1	5	9	2.5	1.5	4.5	39.5	10.0	100.00
G	4	10	9	6.5	10	10	8	9	7.5	74.0	24.5	600.25
H	4	7	6.5	6.5	2	5.5	6	8	2.5	48.0	1.5	2.25
I	8.5	2	2	3	4	7	6	1.5	6	40.0	9.5	90.25
J	2	4	2	6.5	9	5.5	2.5	6	7.5	45.0	4.5	20.25
										495.0		1914.50

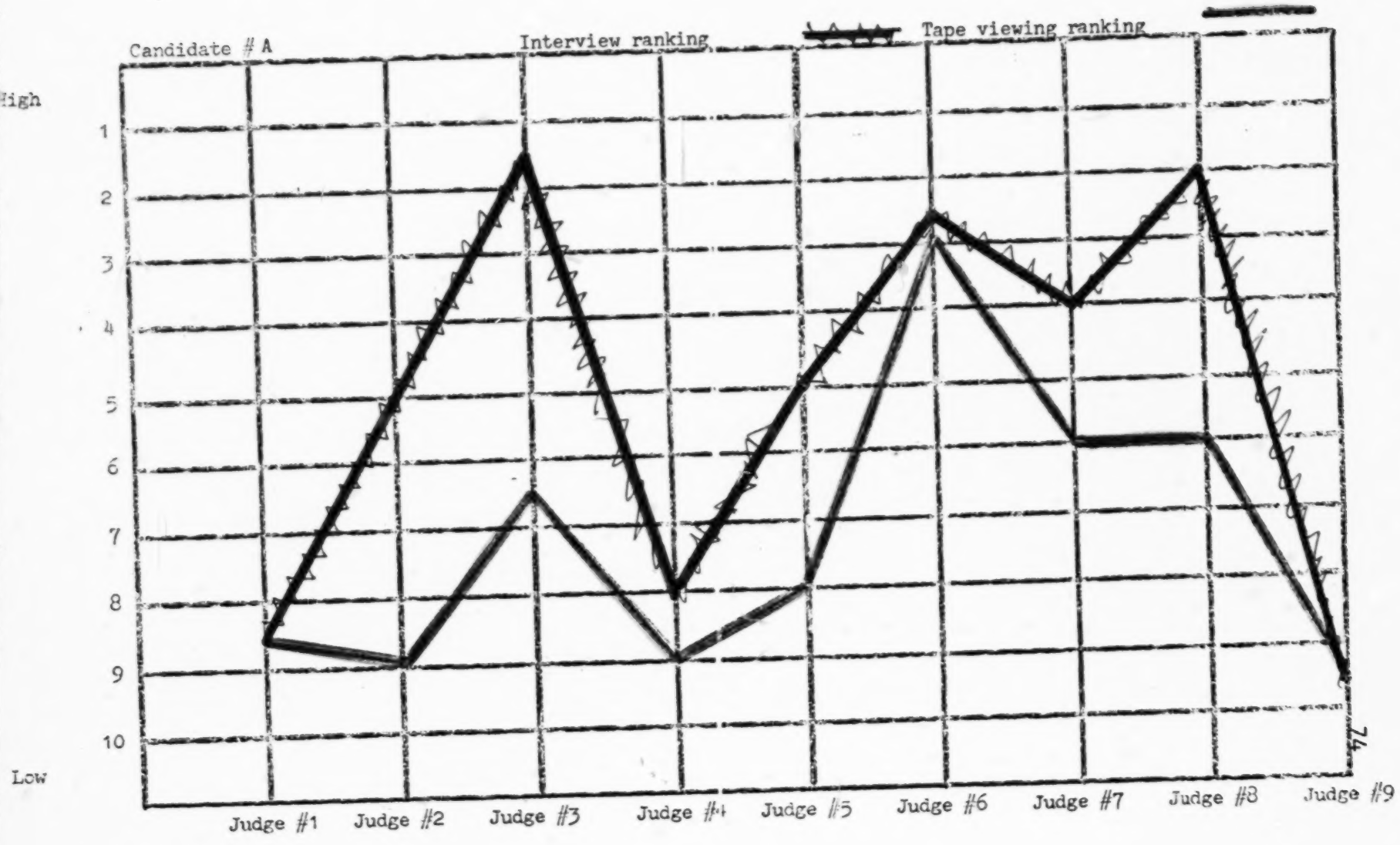
$$W = \frac{12(1915.5)}{81\ (10)\ (99)}$$

$$W = .286$$

Kendall's Coeffiecient of Concordance, W.
Basic Statistical Methods, Third Edition, EN.M. Downi: and R.W. Heath, (Harper & Row, N.Y., 1970) pp. 124-125.

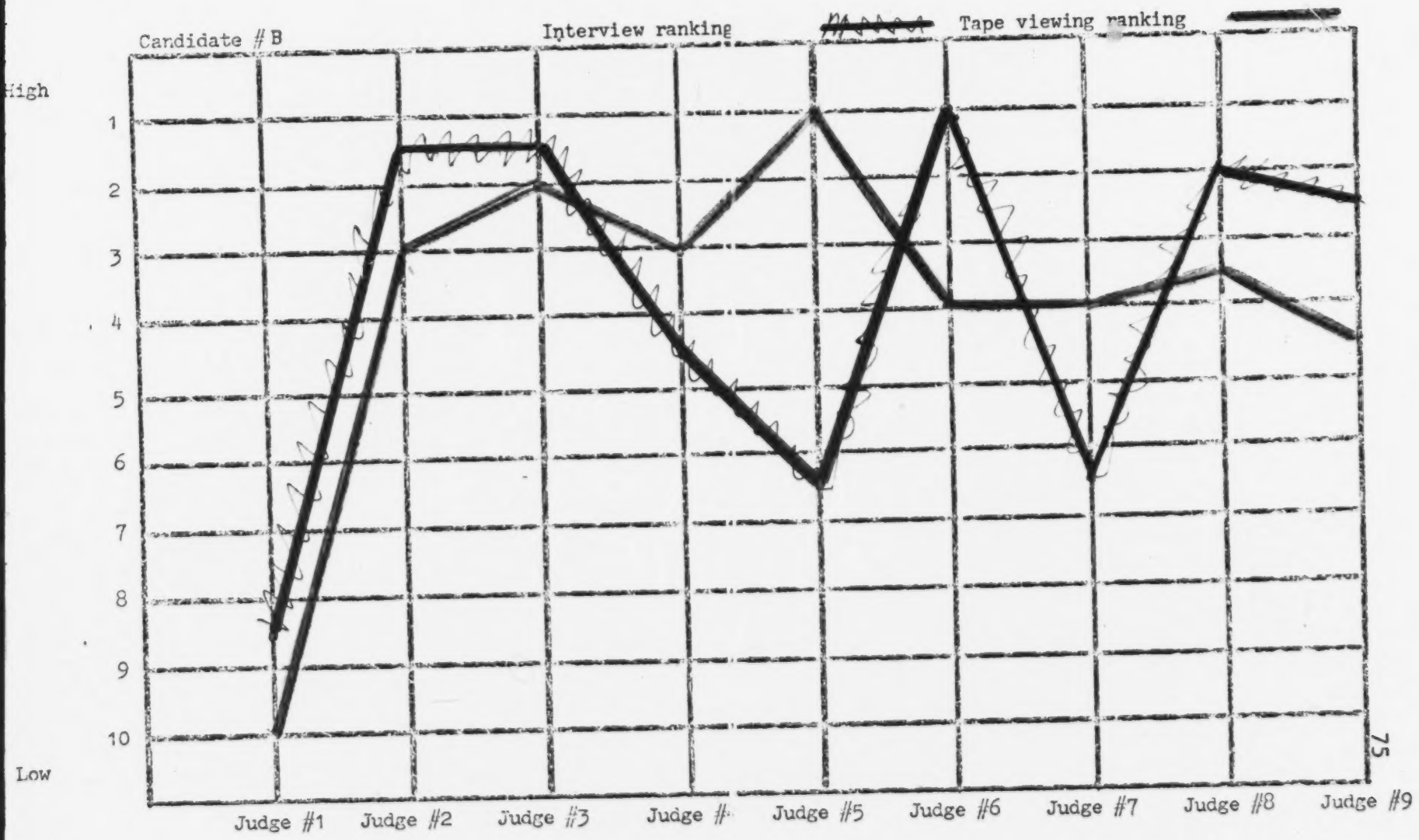
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



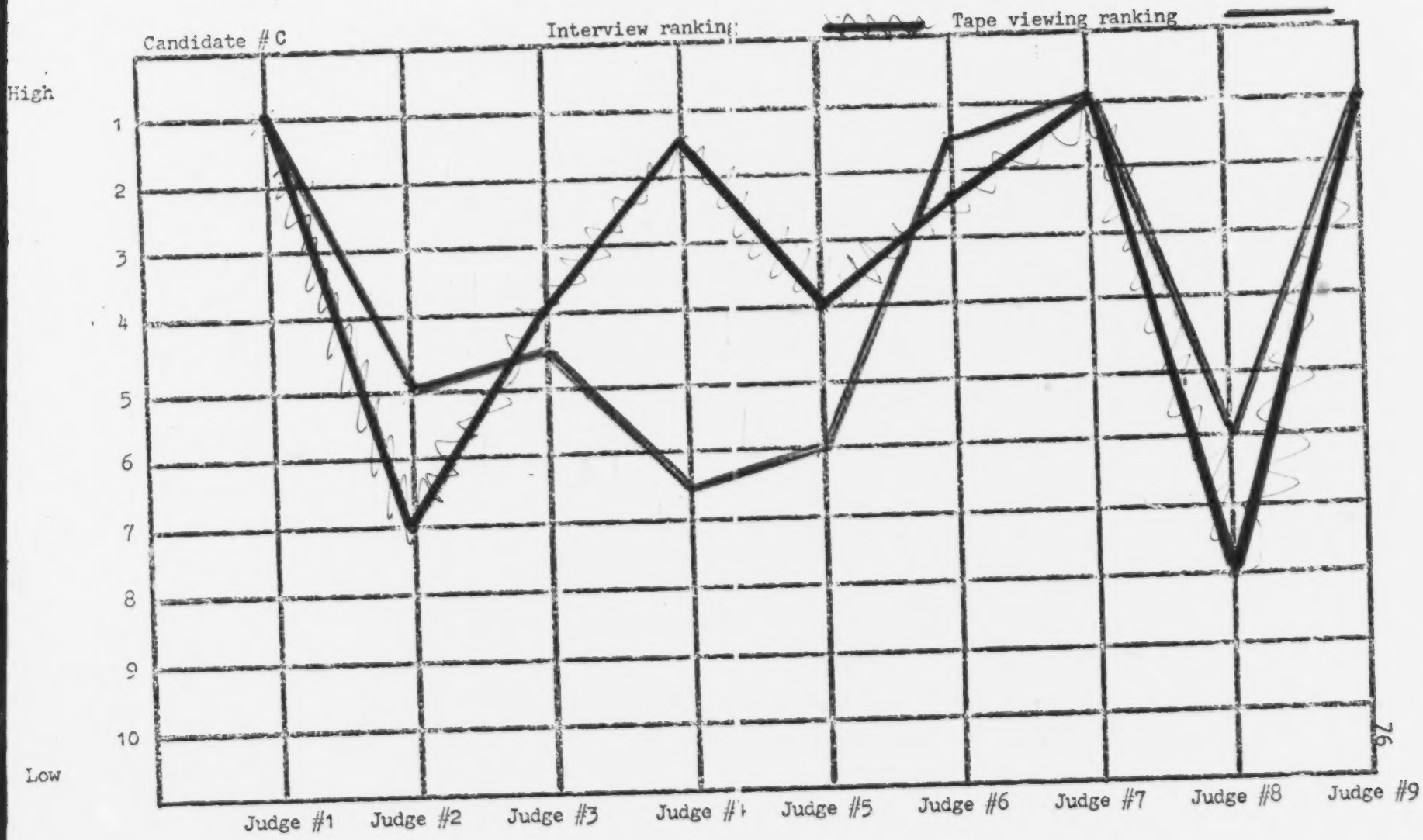
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



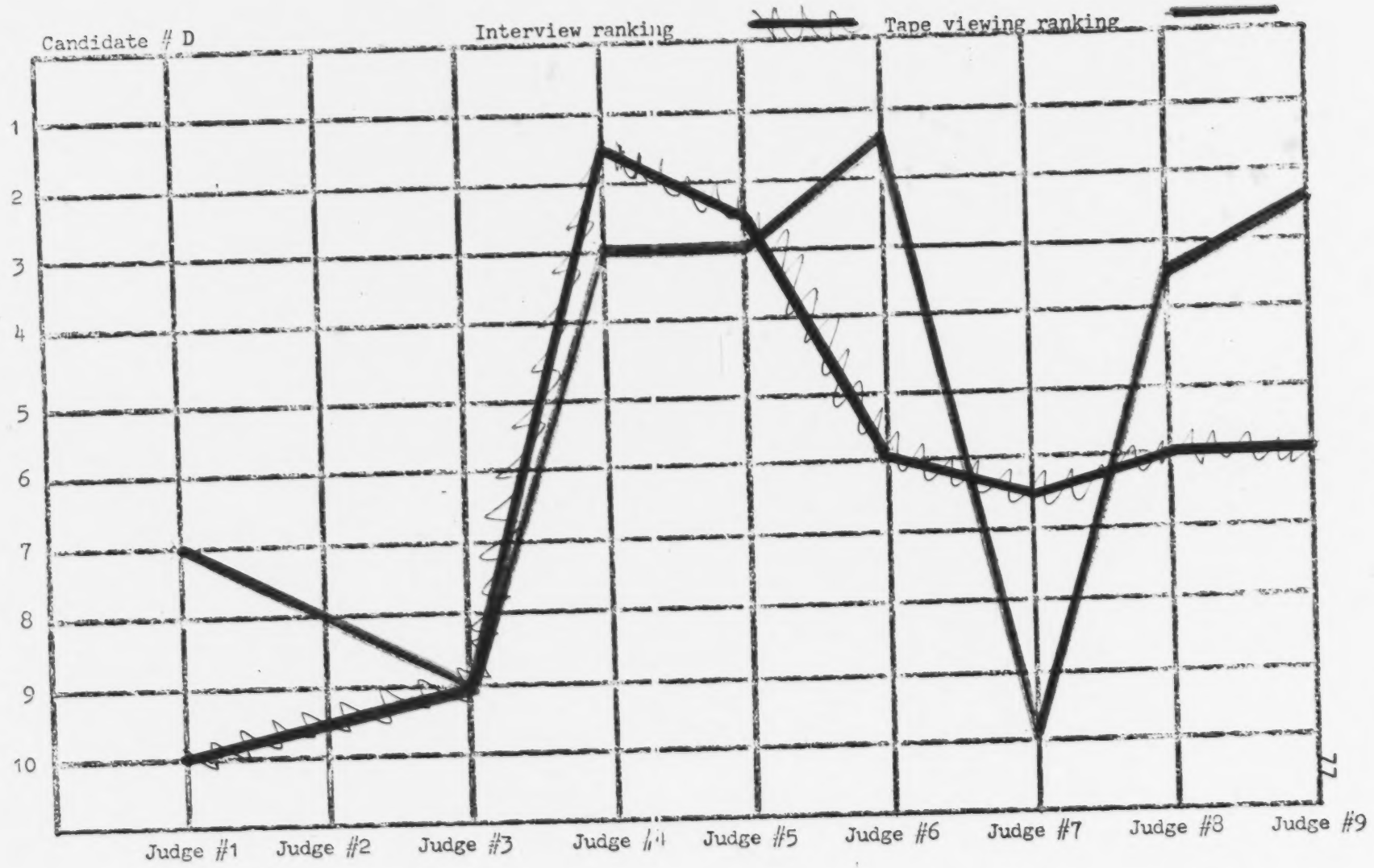
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



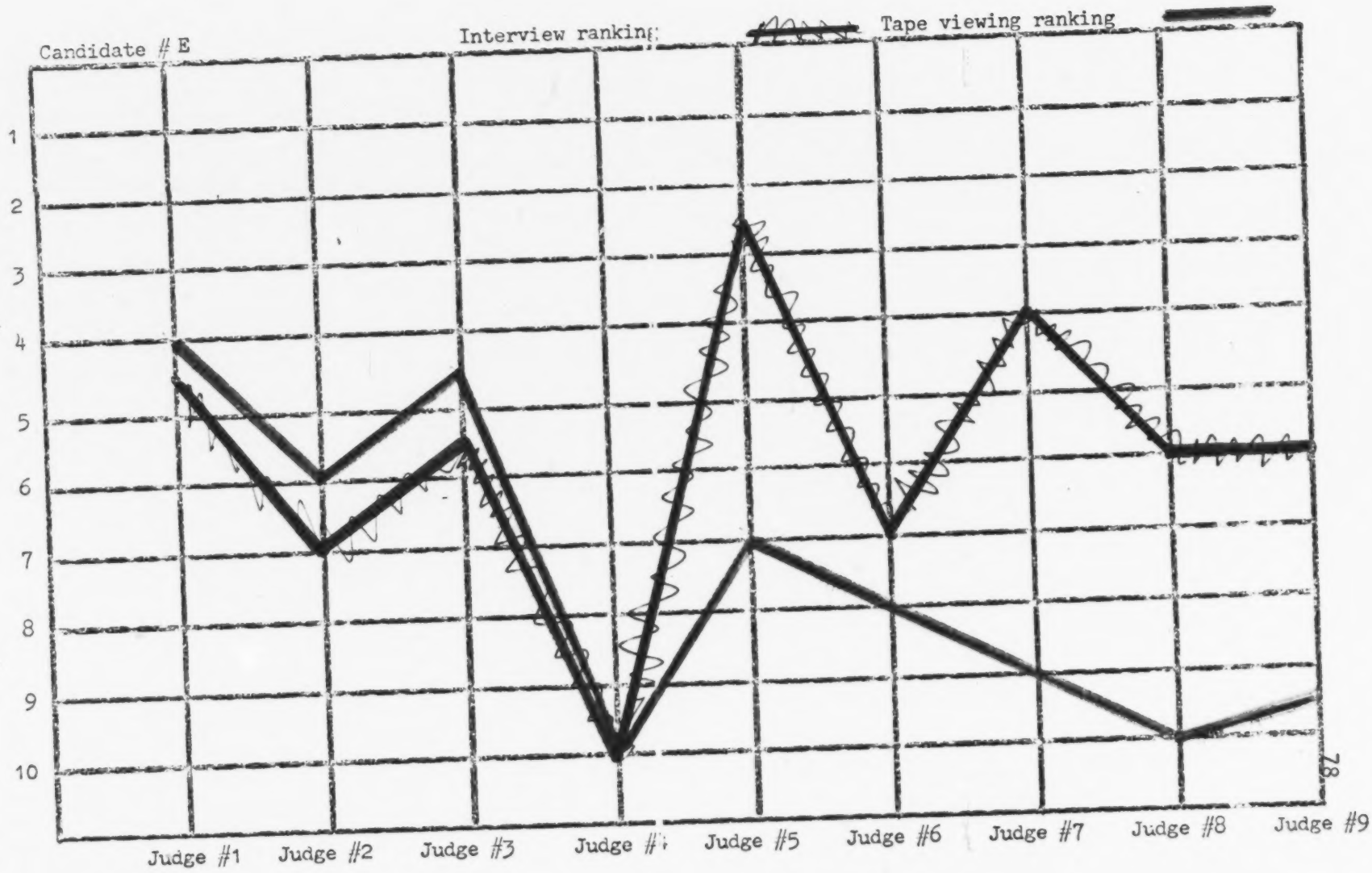
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



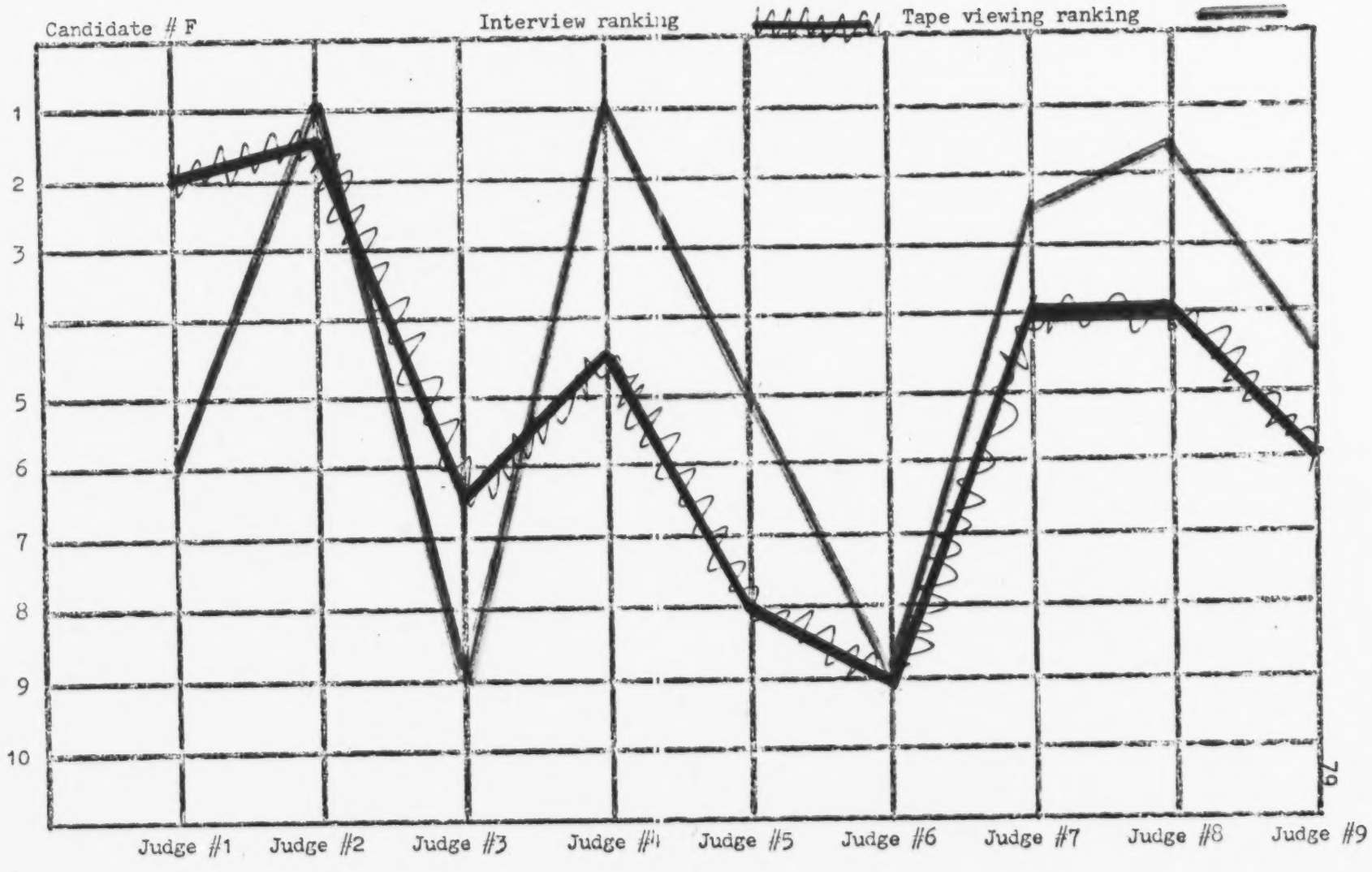
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



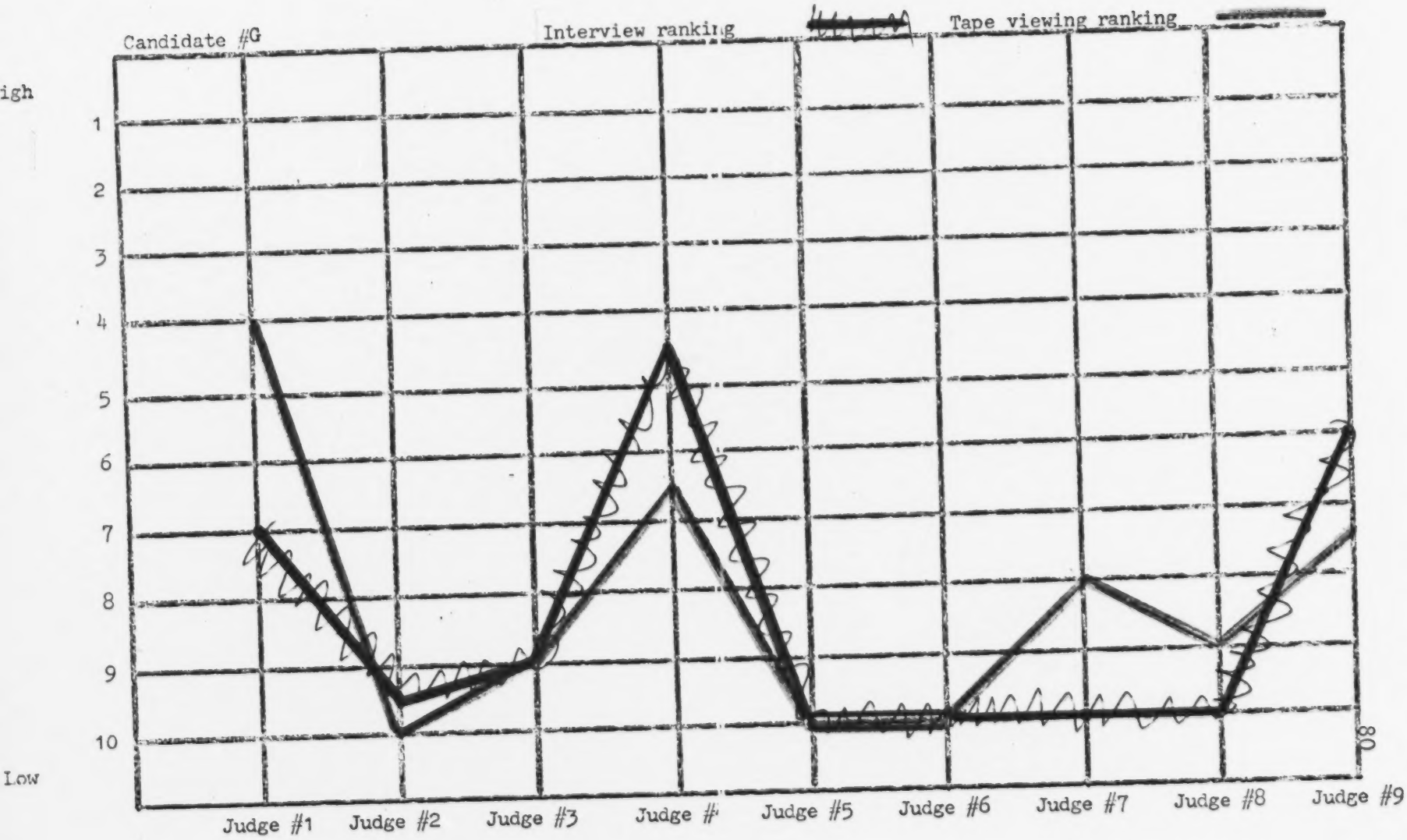
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



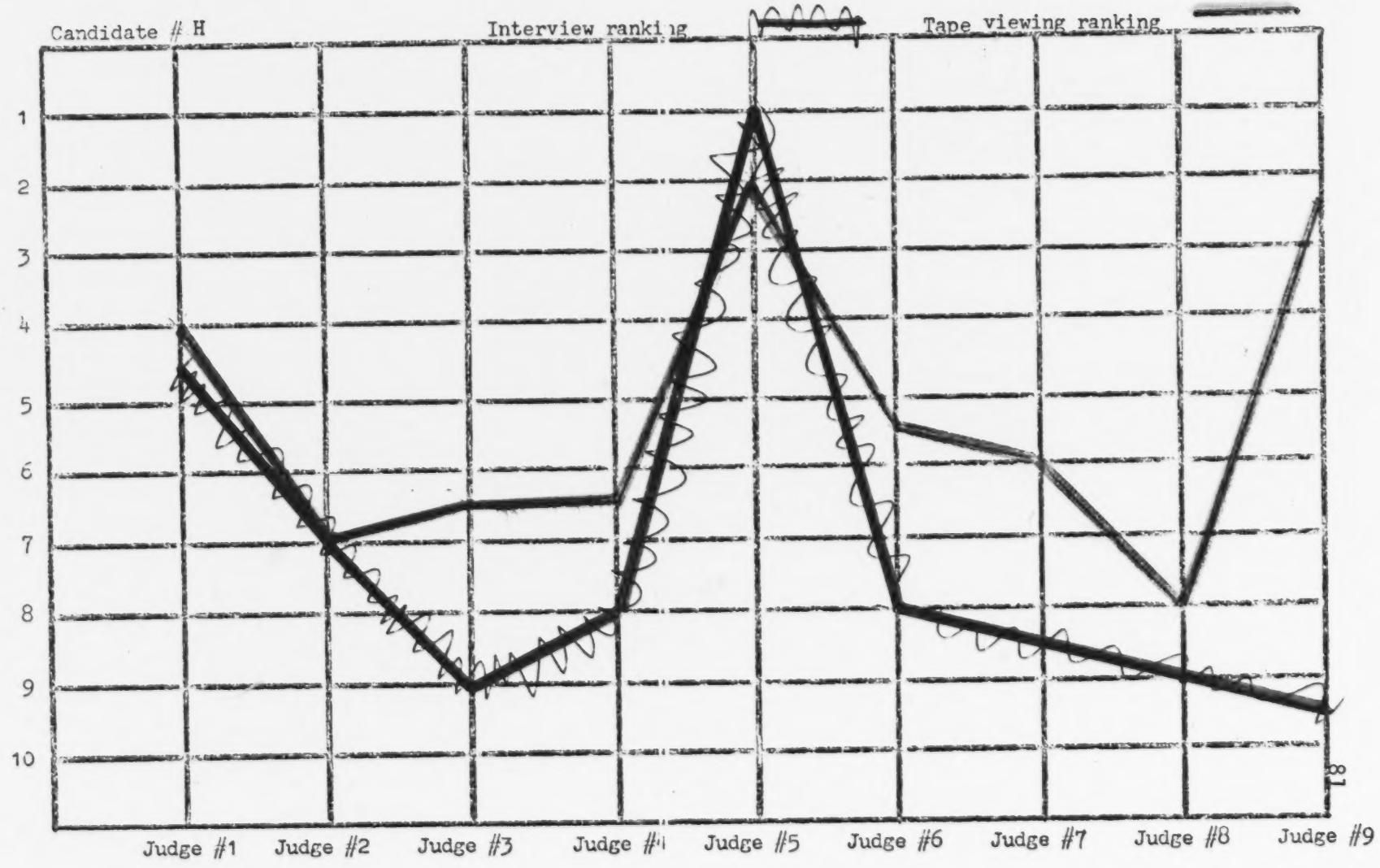
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



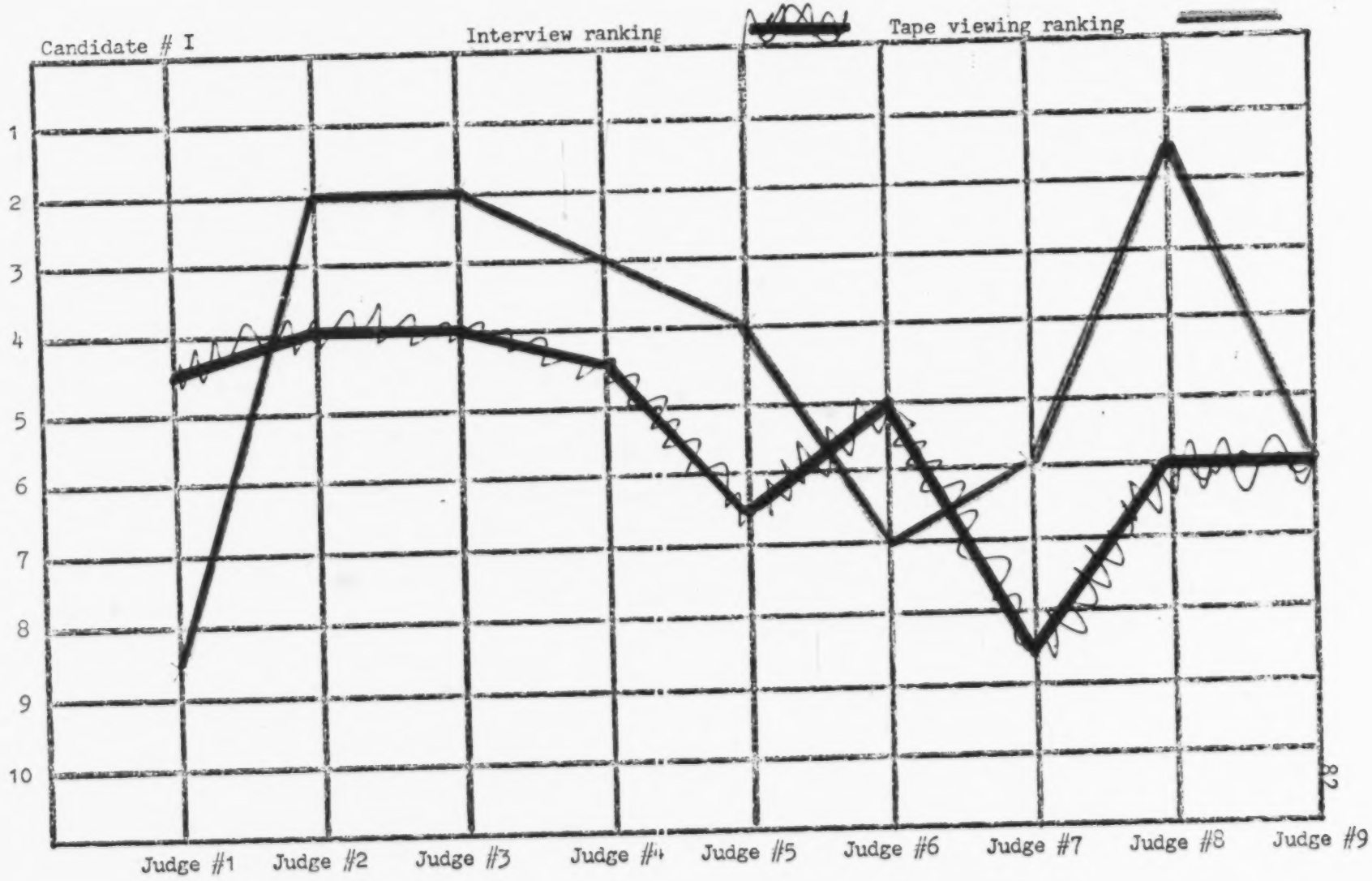
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



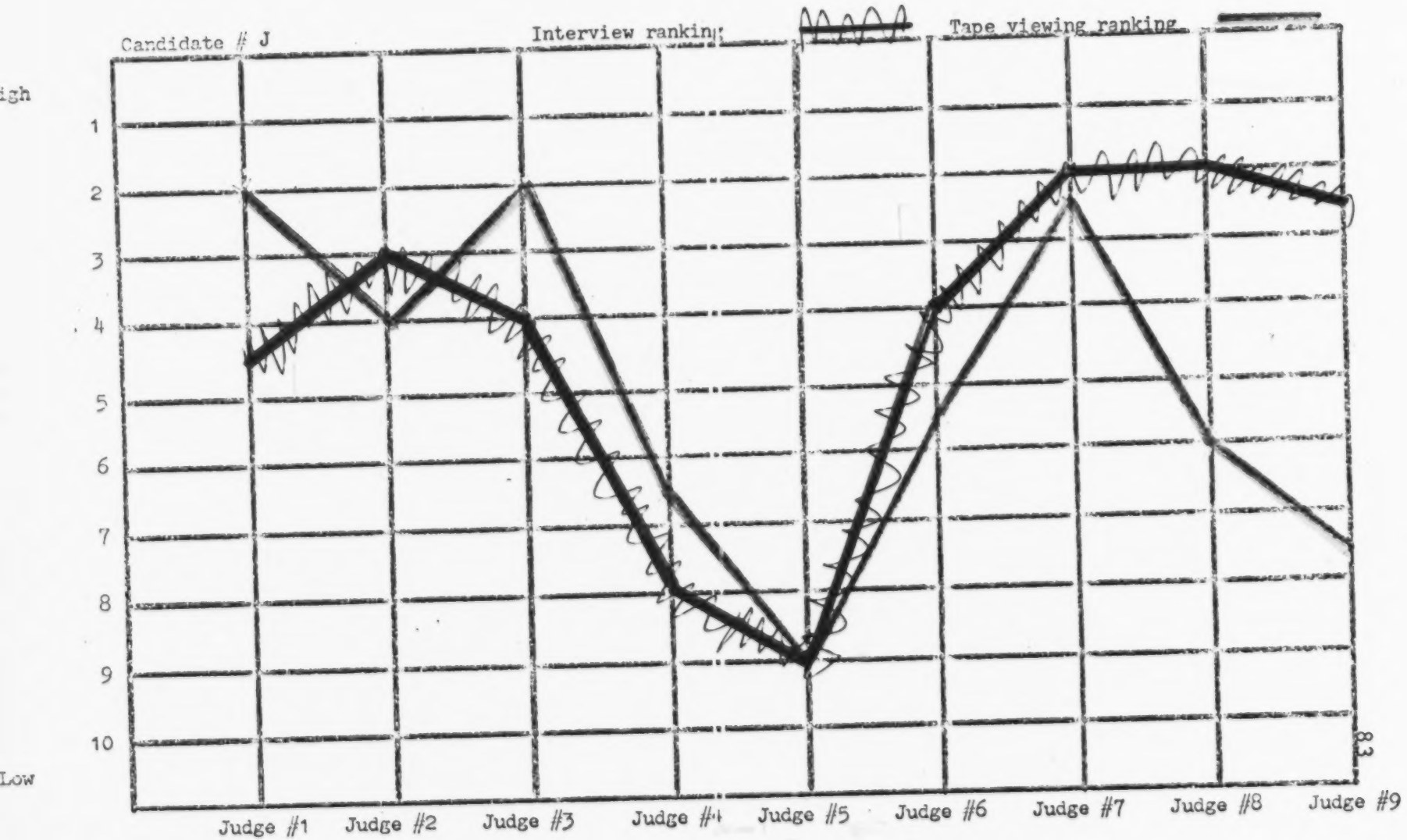
RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



RANKING OF INDIVIDUAL CANDIDATES ACROSS JUDGES

(*Ranking of high of one (1) to low of ten (10))



APPENDIX M

GRAPHS OF JUDGE'S RATING ACROSS TEACHERS (INDIVIDUAL AND MEAN SCORES)

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #1

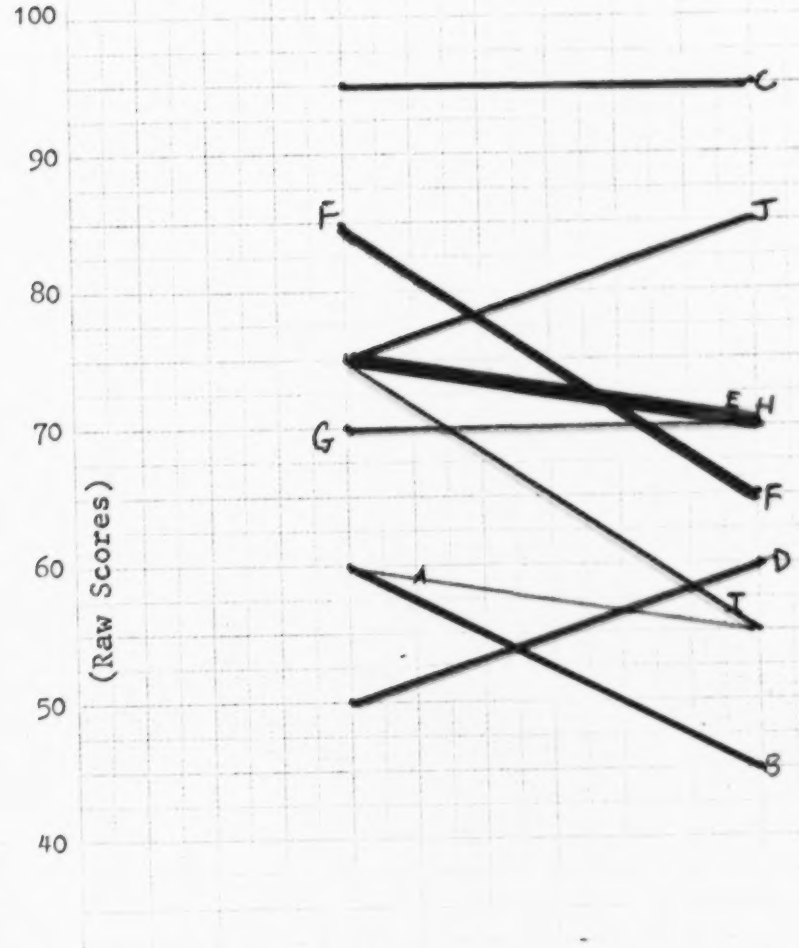
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



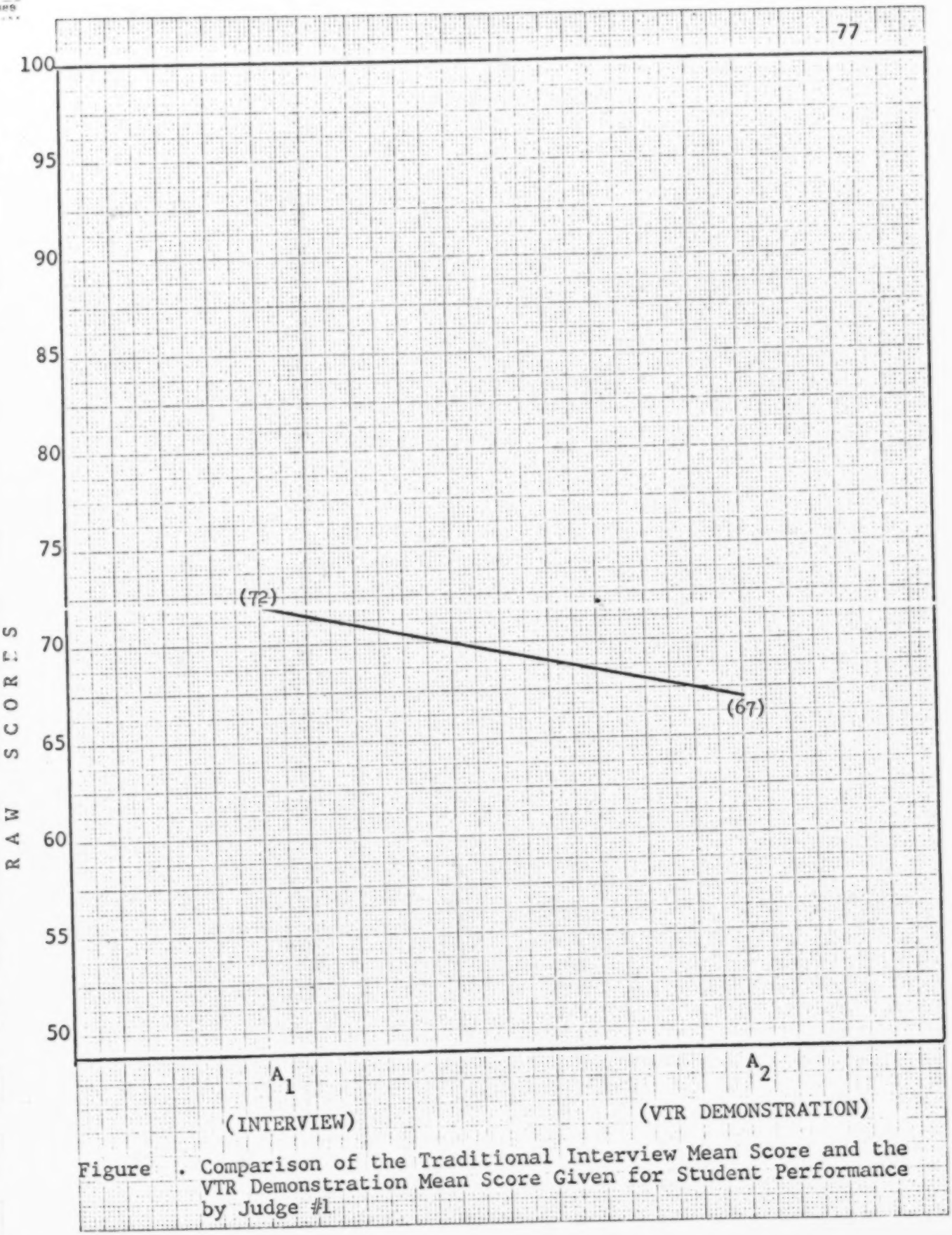


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge #1

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #2

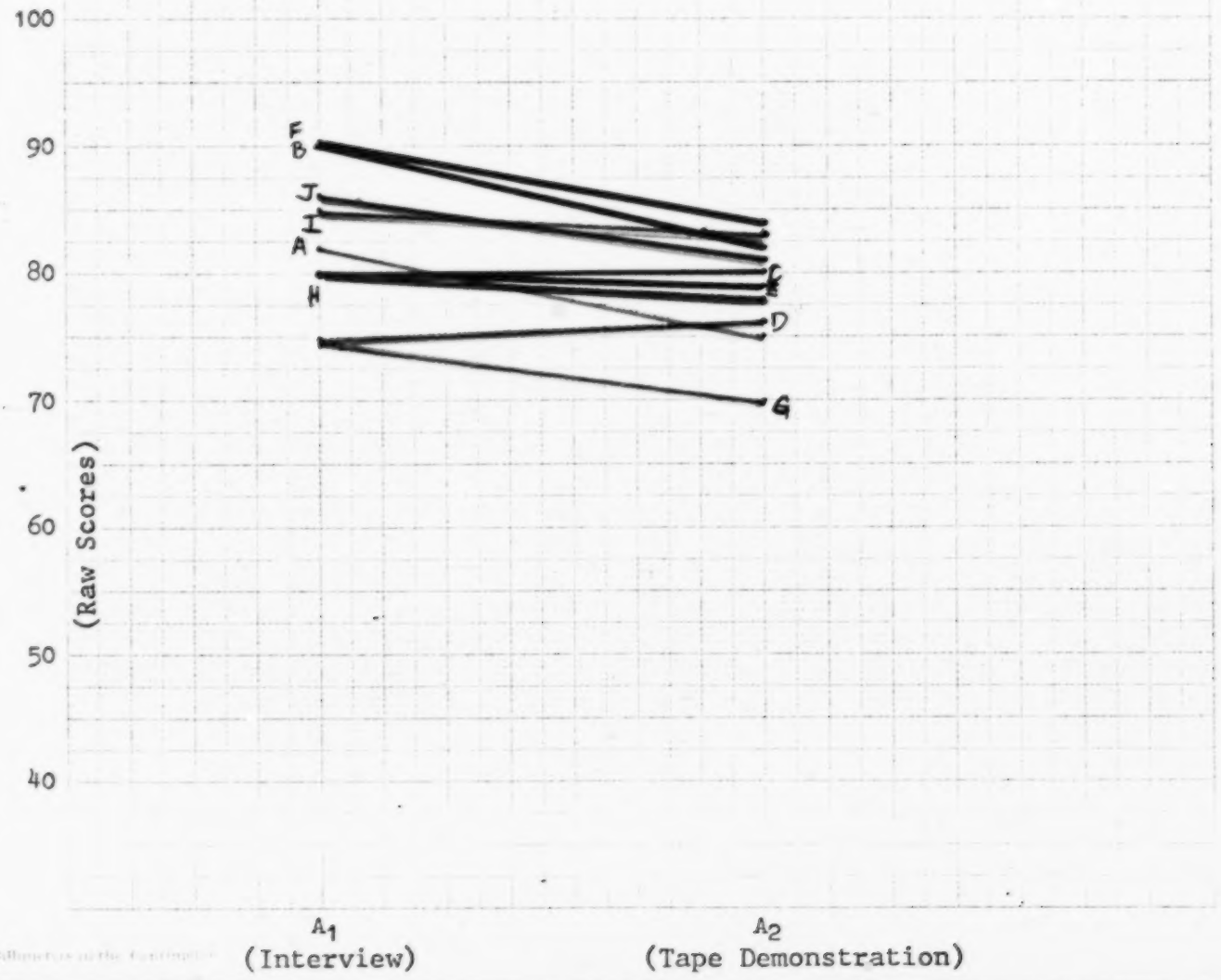
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



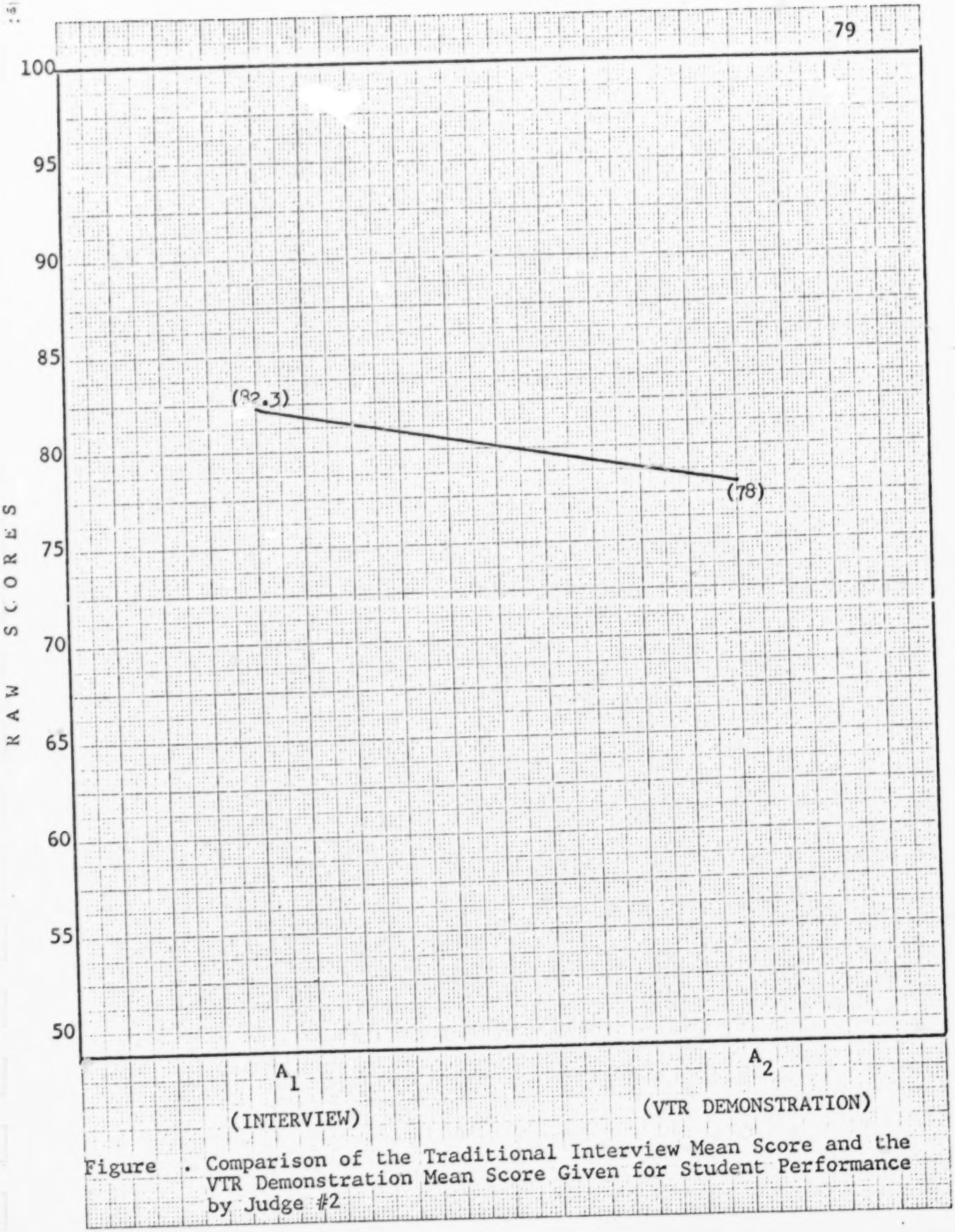


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge #2

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #3

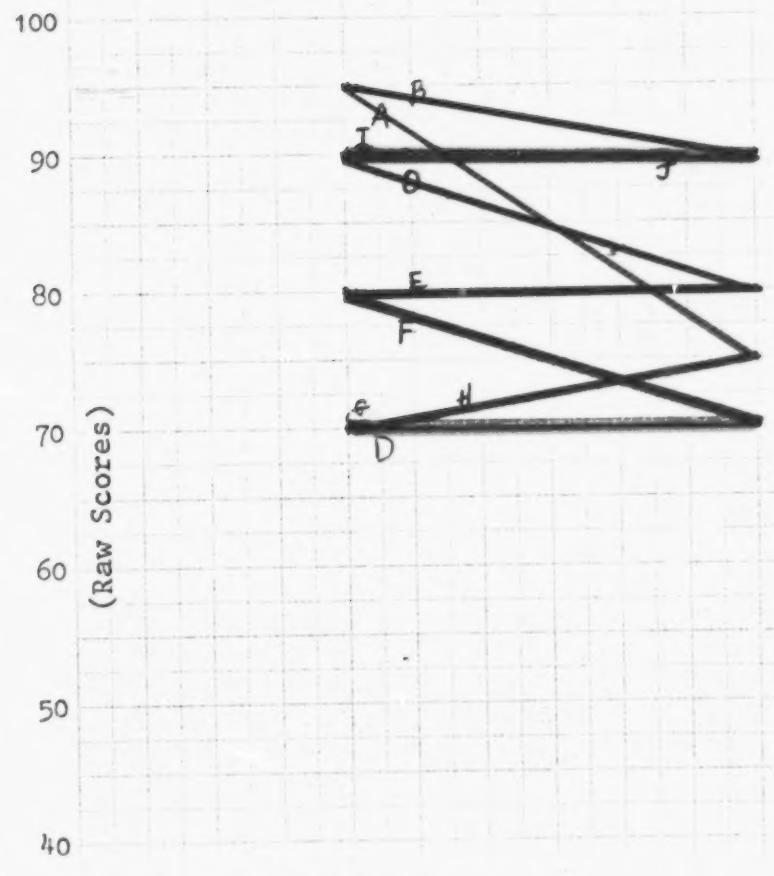
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



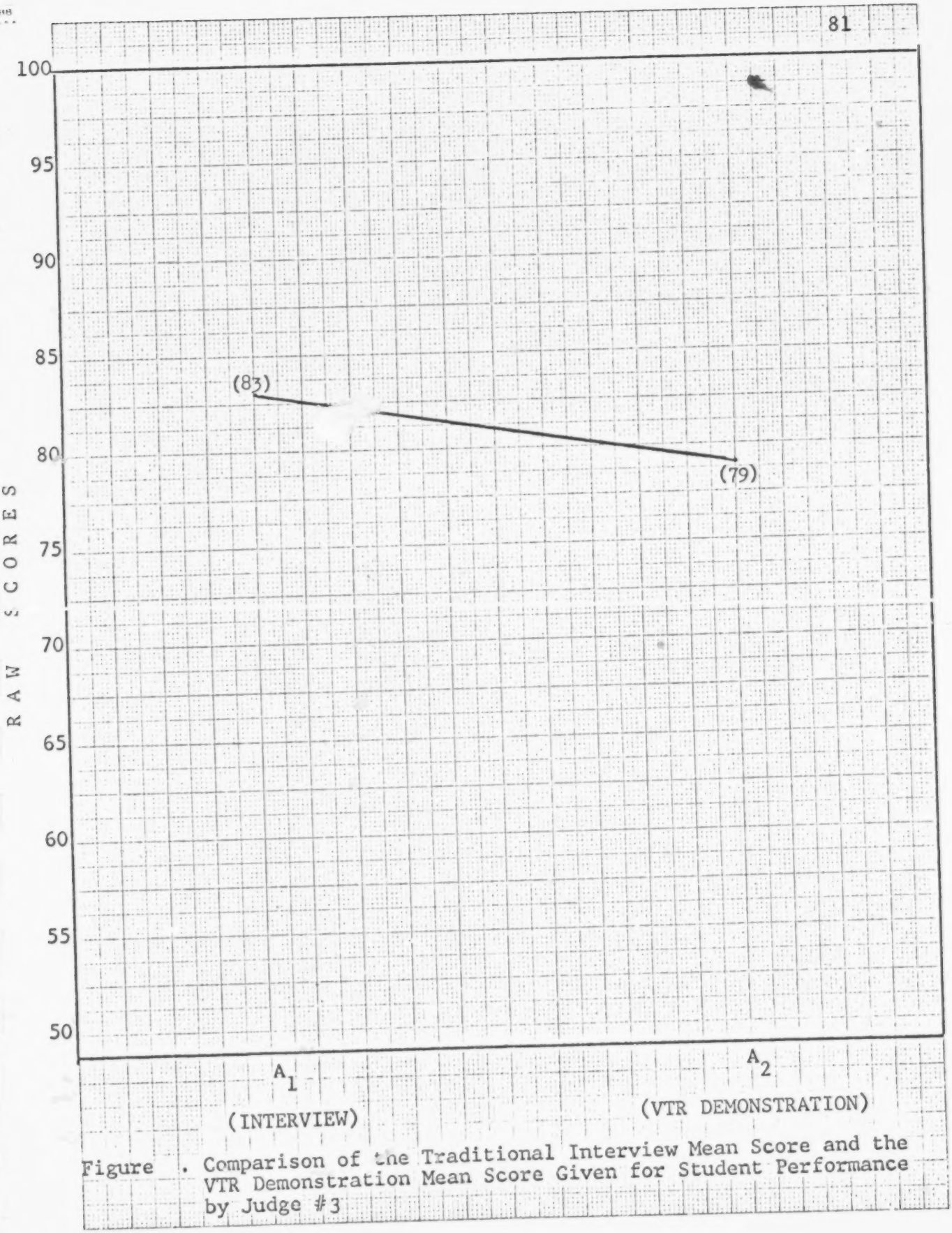


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge #3

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #4

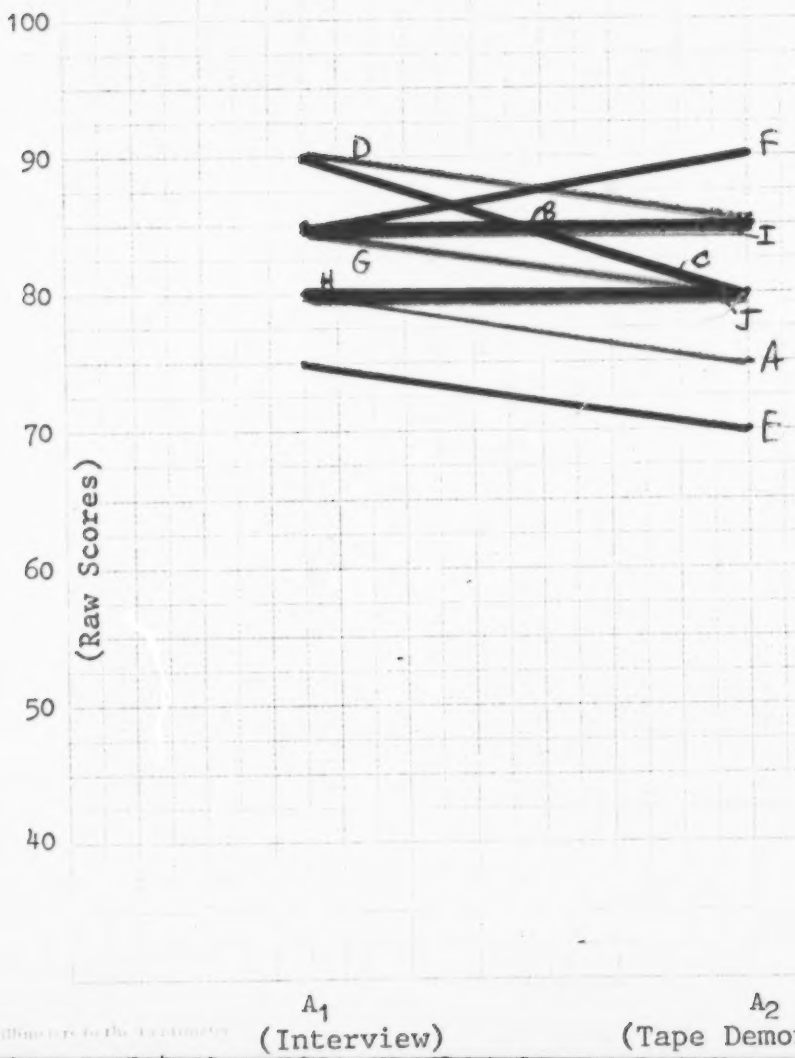
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



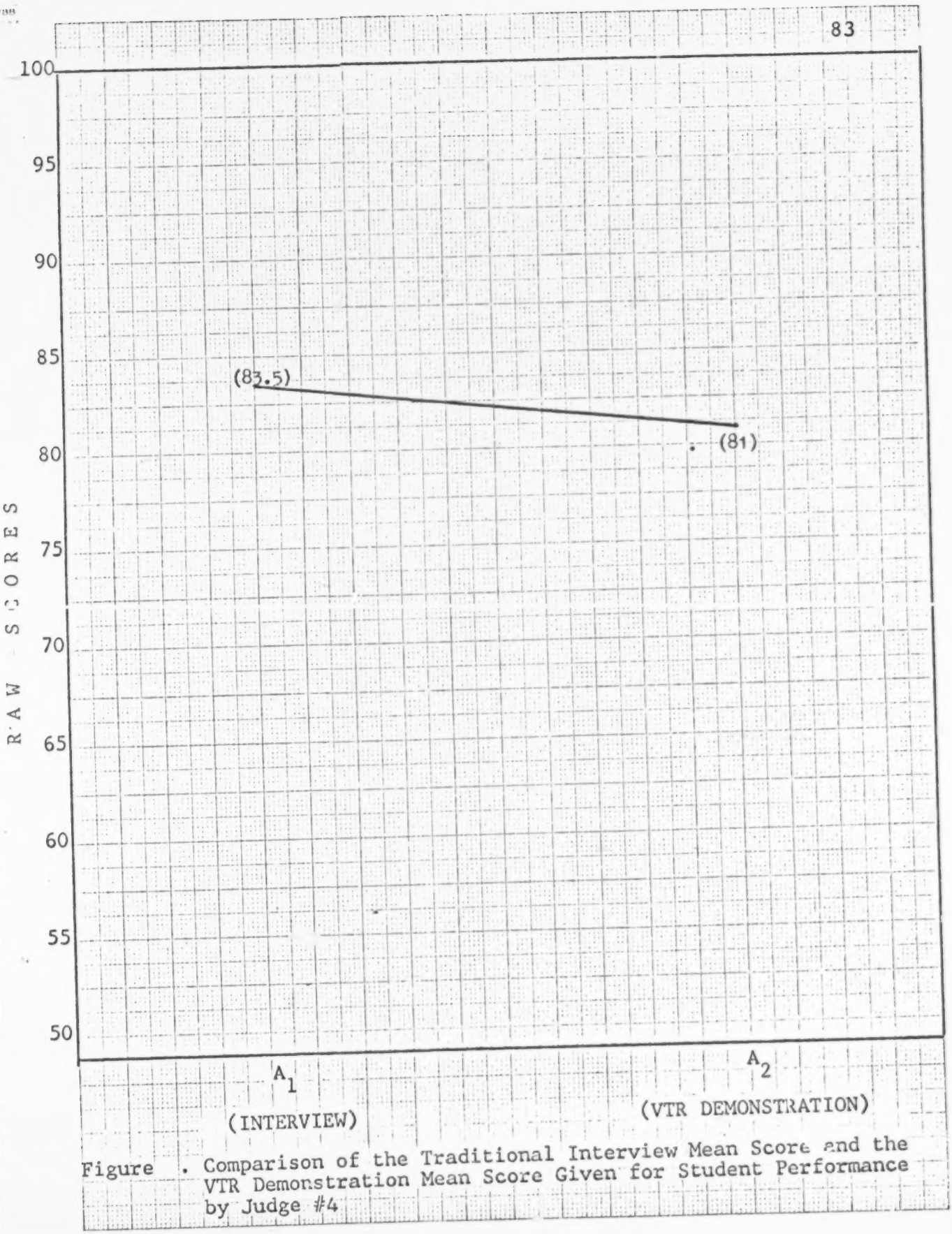


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge #4

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #5

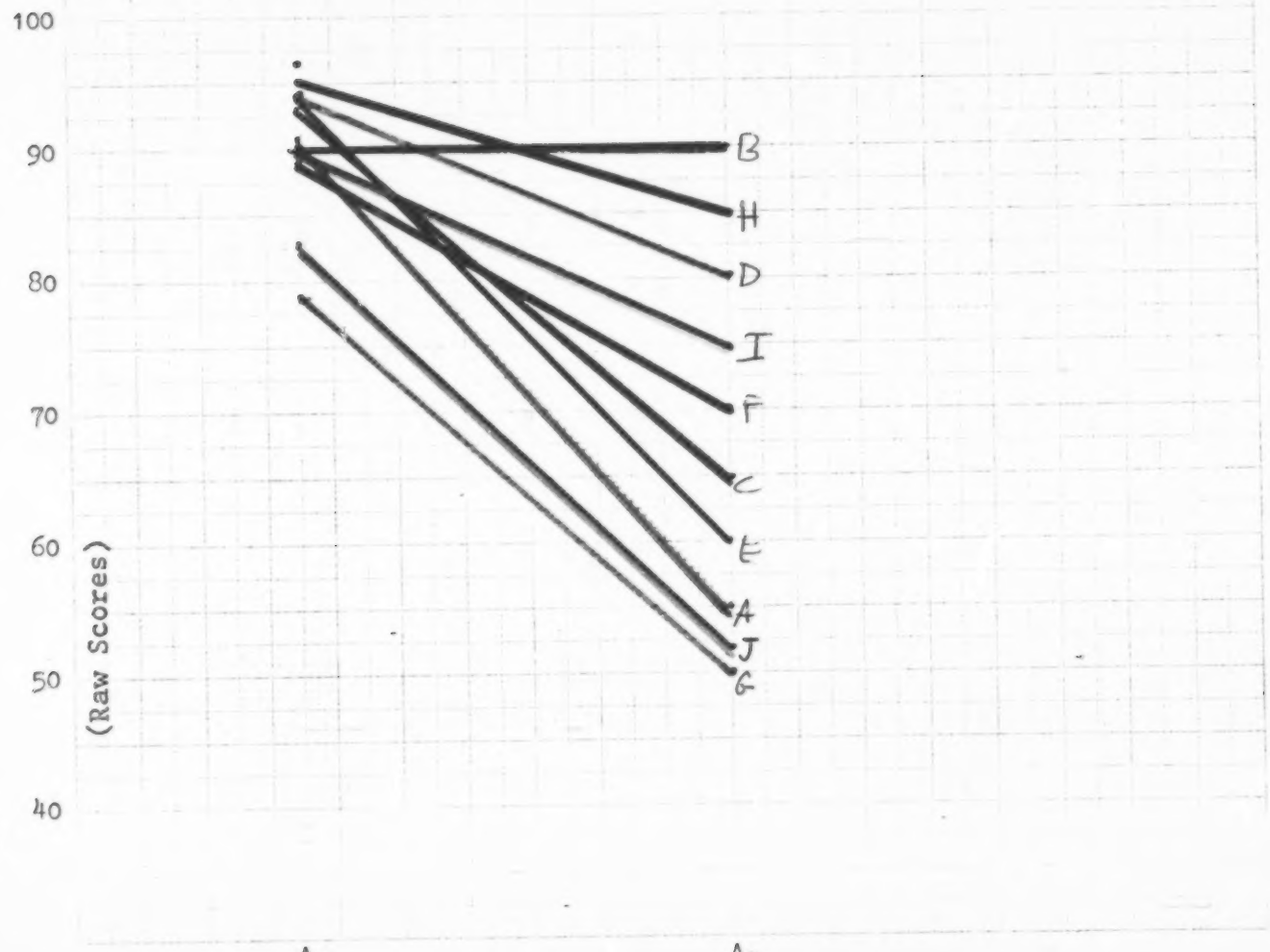
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



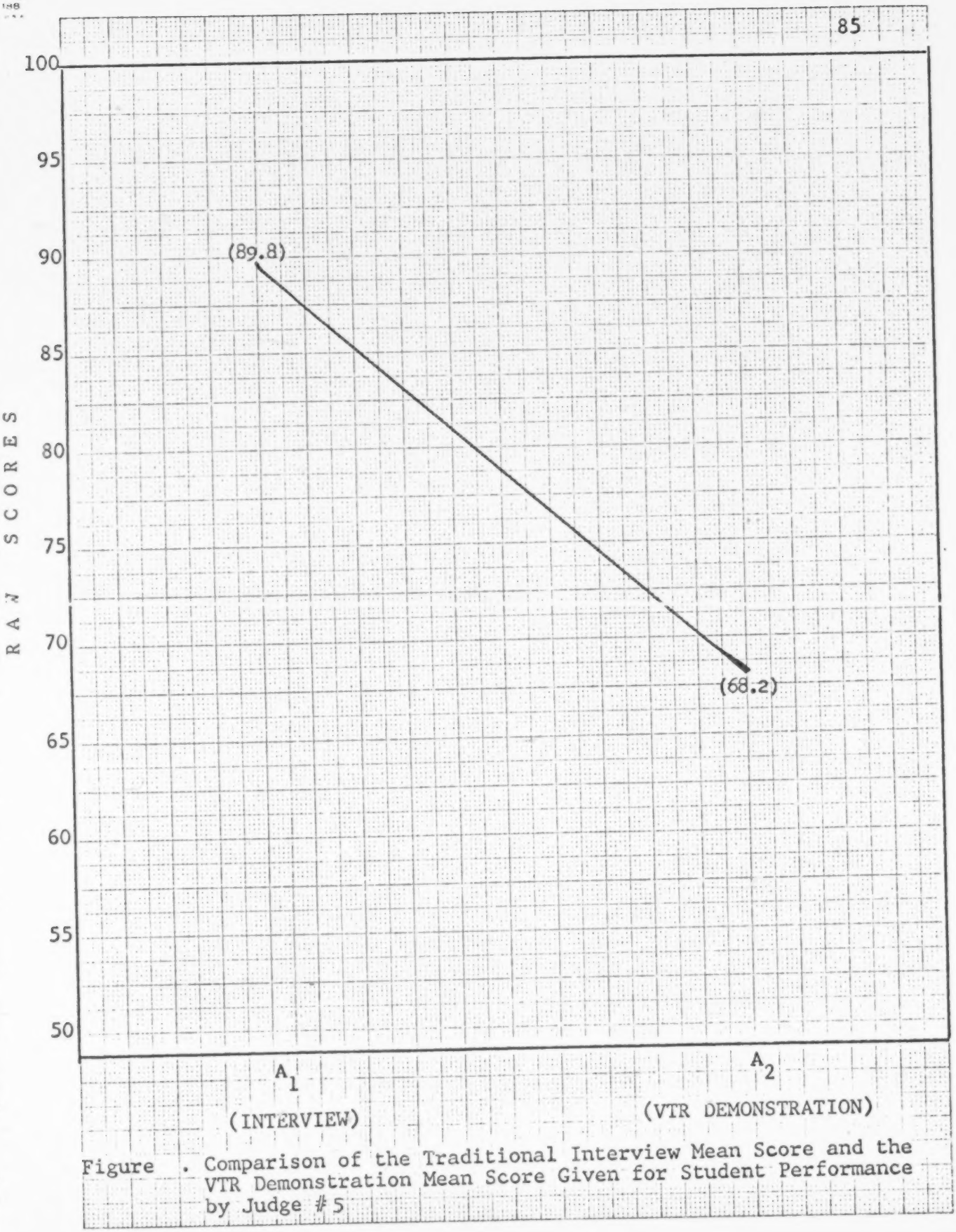


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge # 5

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #6

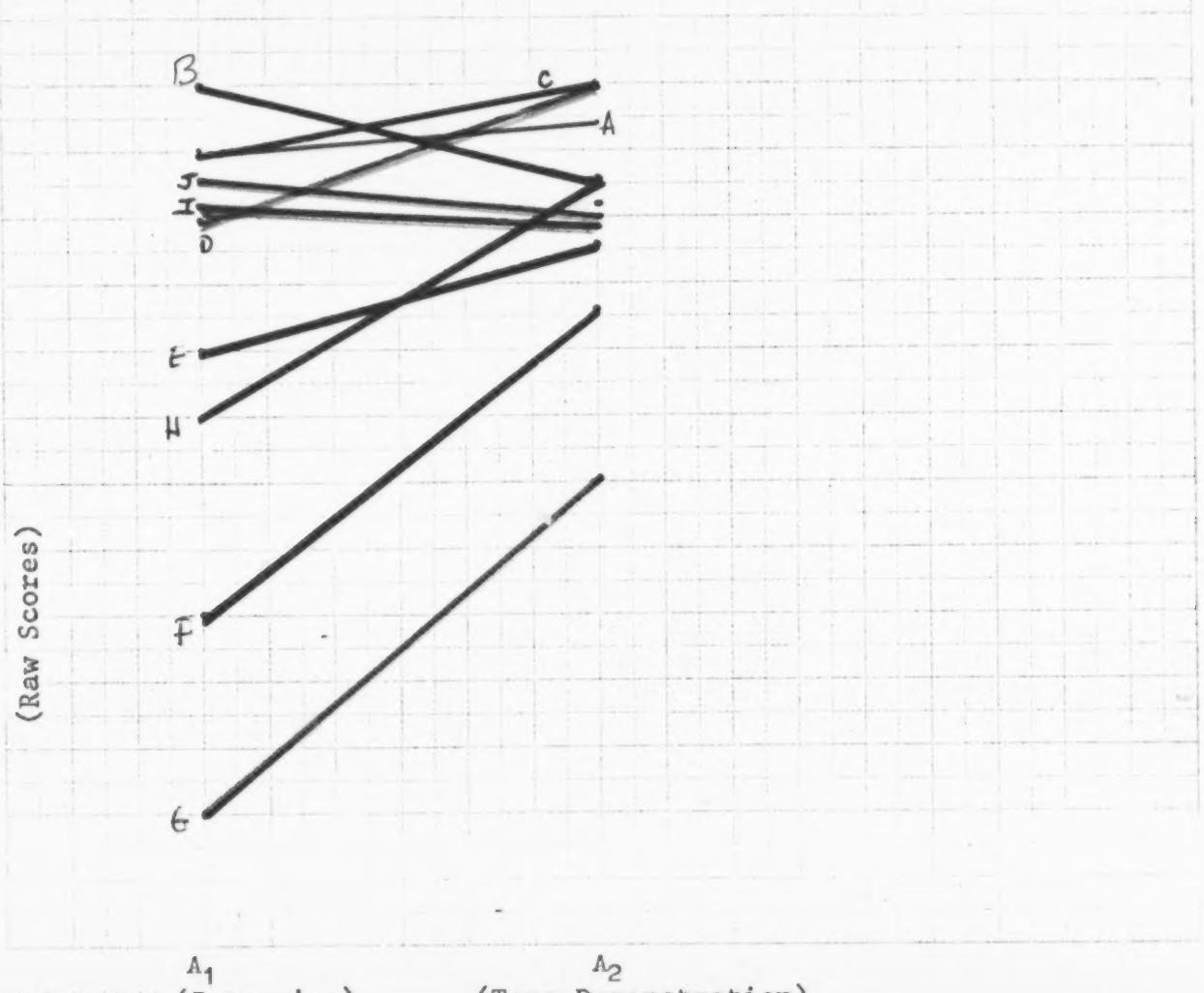
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



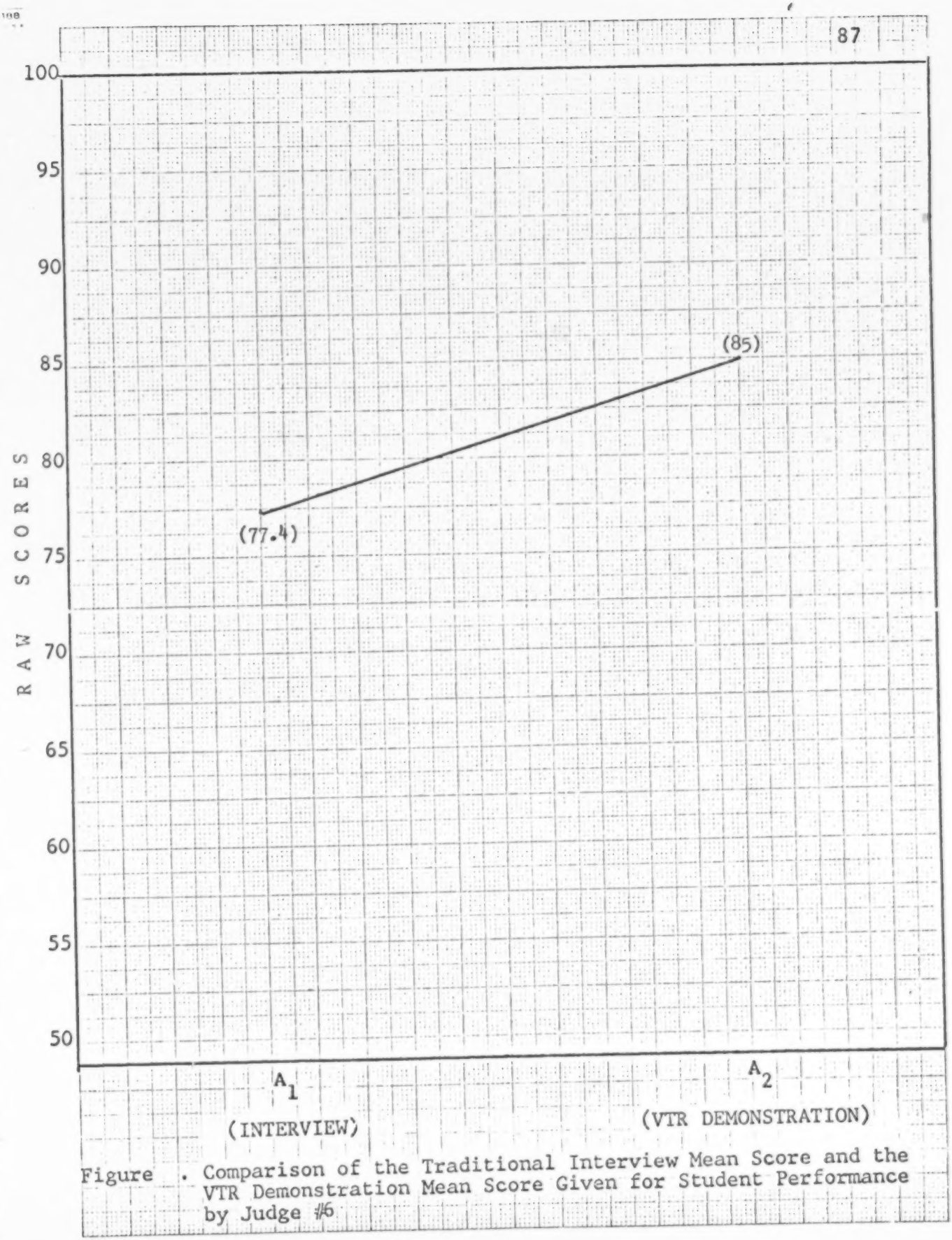


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge #6

COMPARISON OF TRADITIONAL INTERVIEW AND VTR DEMONSTRATION

JUDGE #7

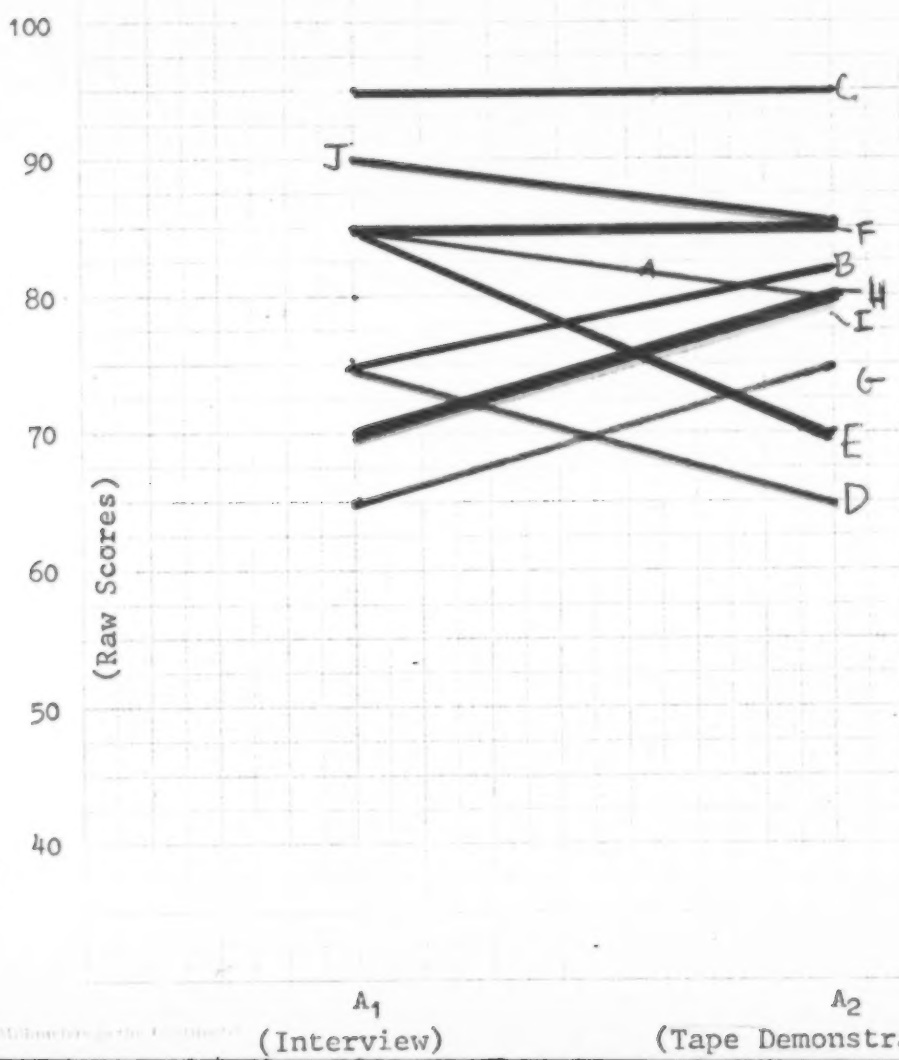
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



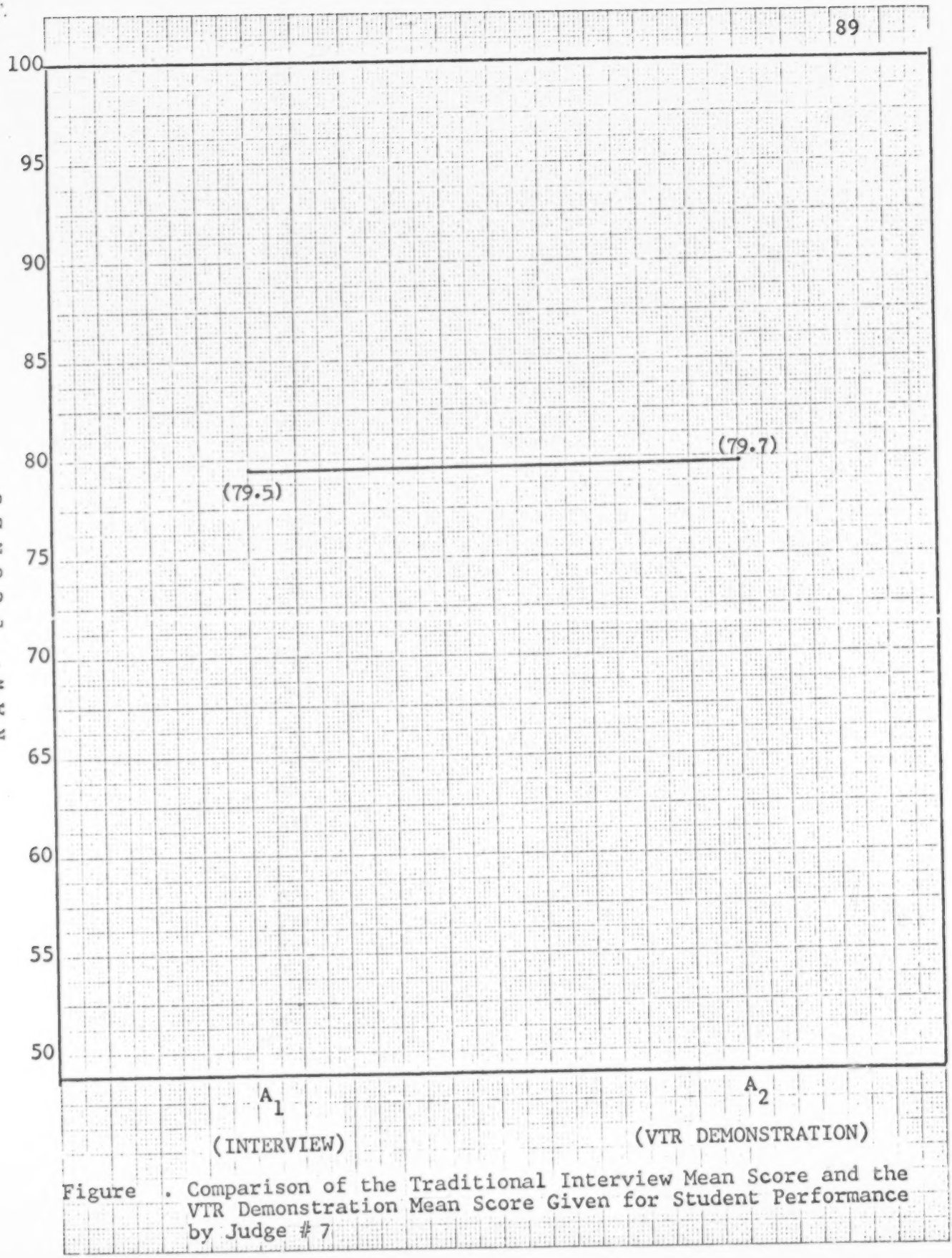


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge # 7

JUDGE #8

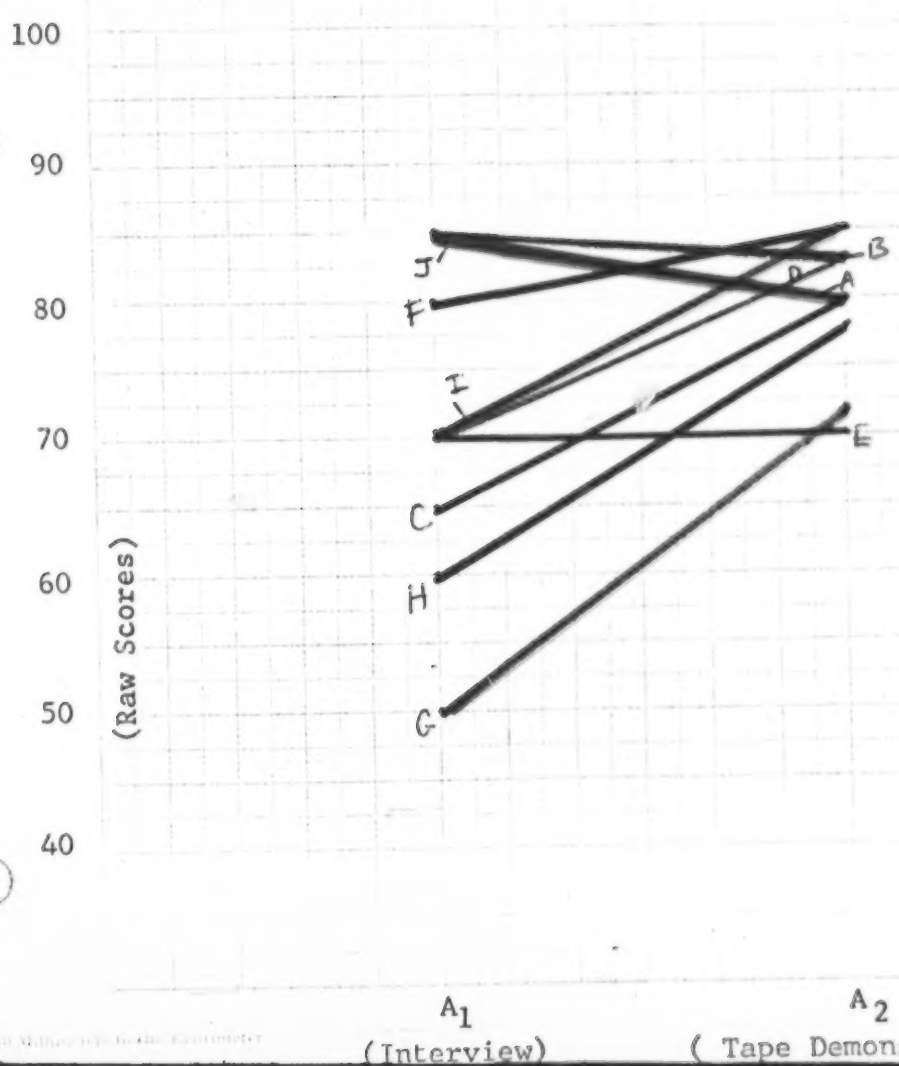
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A_2 Tape Teaching Demonstration



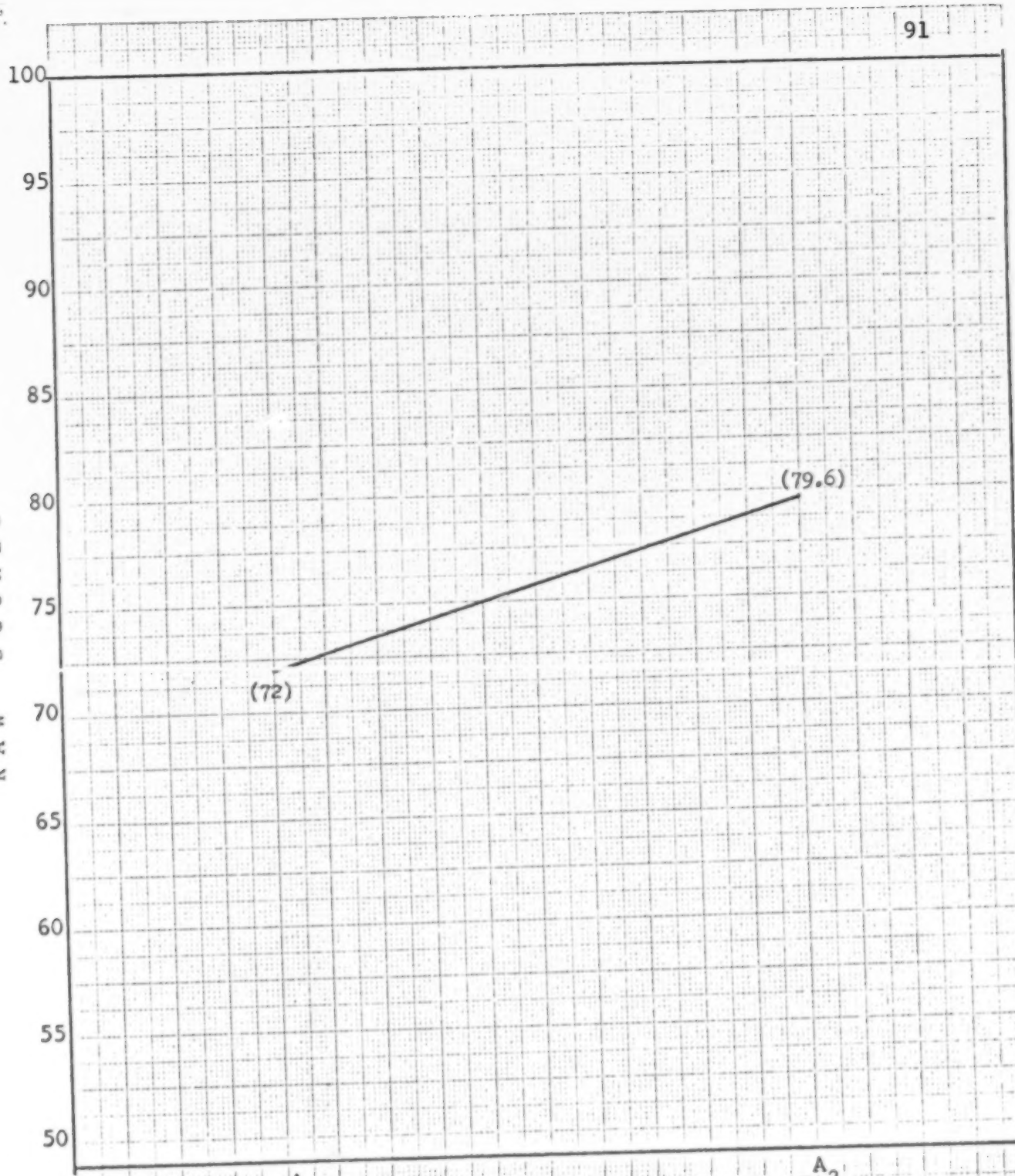


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge # 8

COMPARISON OF TRADITIONAL
INTERVIEW AND VTR DEMONSTRATION

JUDGE #9

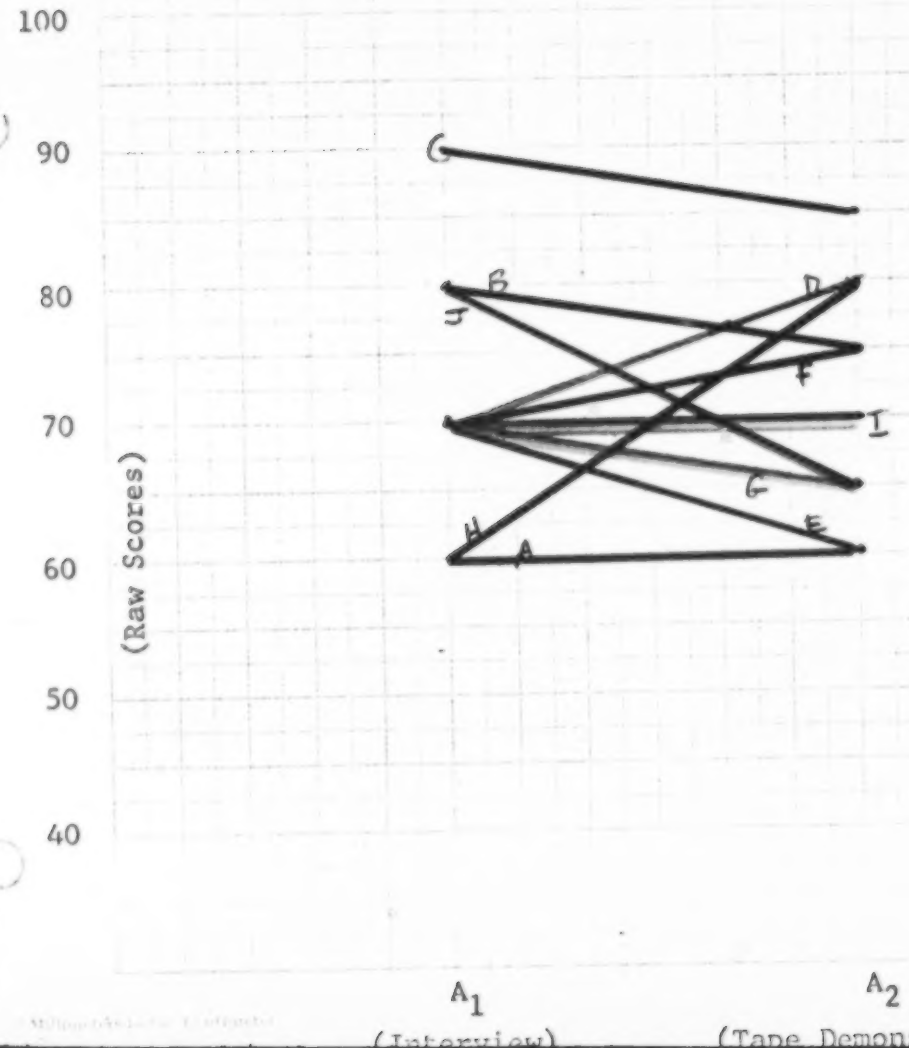
Candidate's Score

A
B
C
D
E
F
G
H
I
J

Treatment

A_1 Interview

A Tape Teaching Demonstration



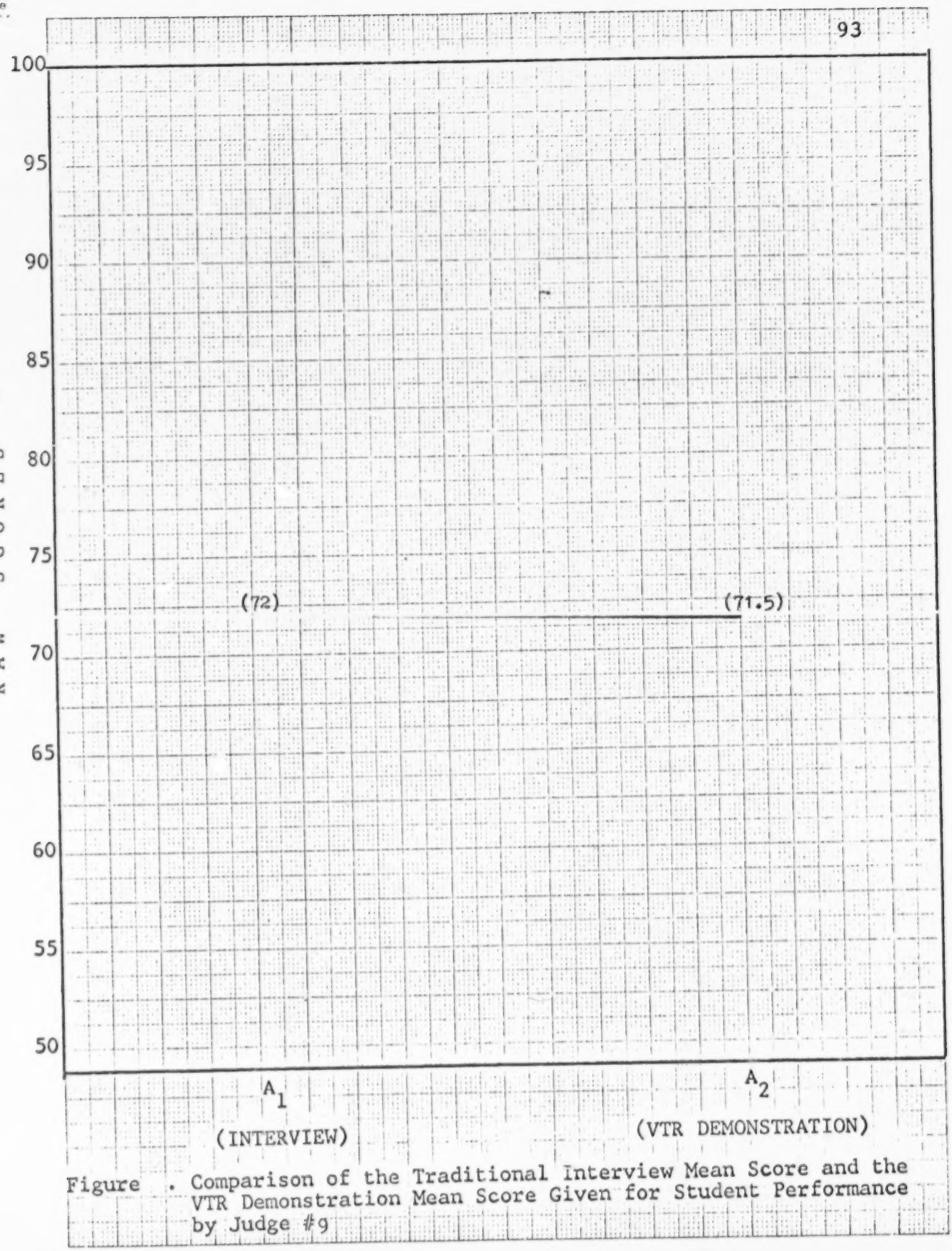


Figure . Comparison of the Traditional Interview Mean Score and the VTR Demonstration Mean Score Given for Student Performance by Judge #9

(Interview) (Tape Demonstration)

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